

# Alternate Kentucky Performance Rating for Educational Progress



## 2011–12 Technical Manual

Version 3.0

## **CHAPTER 1: OVERVIEW OF THE ASSESSMENT SYSTEM**

### **Purposes of the Accountability System**

The vision of the Kentucky Board of Education (KBE) is to ensure that all students reach proficiency and graduate from high school ready for college and careers. The board's vision is informed by a changing economy that requires P-12 schools to prepare students for a more complex and competitive workplace.

The Long-Term Accountability model adopted by KBE is a growth model with schools serving as their own baseline. All students and thus all schools are expected to demonstrate improvement within the system. School improvement plans, such as a school's consolidated plan, are influenced by the results of the accountability system. Visits to high performing schools (i.e., schools demonstrating substantial gains) generally confirm the seriousness with which these schools approach accountability data and their creativity in using the data to adjust instructional programs.

### **K-PREP Assessments**

Senate Bill 1 (SB 1), enacted in the 2009 Kentucky General Assembly, required a new public school assessment program beginning in the 2011-12 school year. These assessments are collectively named the **Kentucky Performance Rating for Educational Progress (K-PREP)**.

The new assessment for grades 3-8 blends norm-referenced test (NRT) and criterion-referenced test (CRT) items which consist of multiple-choice (mc), extended-response (er) and short answer (sa) items. The NRT is a purchased test with national norms and the CRT portion is customized for Kentucky.

NCS Pearson was awarded the contract to provide all assessments for grades 3-8 and writing on-demand at high school.

NCS Pearson currently provides large-scale assessment services in more than 25 states and for the U.S. Department of Education.

### **Alternate K-PREP Assessments**

The Kentucky Alternate Assessment Program, originally developed in 1990 as a result of the Reform Act of 1990, is to provide schools and programs with a valid and reliable means of assessing the instruction provided to students with moderate and significant disabilities. These students represent 1.14% of the total assessed population in Kentucky. Kentucky's Alternate Assessment Accountability Model included all content areas in an item based assessment. Alternate K-PREP includes Attainment Tasks and the Transition Attainment Record for students in grades 8, 10 and 11. These assessments meet federal requirements for the No Child Left Behind (NCLB) Act and Individuals with Disabilities Education Improvement Act (IDEIA). These assessment options were required by implementation of Senate Bill 1 discussed above in the first paragraph.

Alternate K-PREP includes two components: Attainment Tasks (AT) and the Transition Attainment Record (TAR). These two components play important roles in the assessment of the individual student.

### **Attainment Tasks (AT)**

Attainment tasks are individually administered item based assessments that require students to complete a task, working step by step as directed by the teacher.

### **Transition Attainment Record (TAR)**

The Transition Attainment Record is a rating scale that evaluates the student's readiness in reading, mathematics and science.

The assessment and accountability model represents balanced approach that incorporates all aspects of school and district work. It represents Kentucky Board of Education's strategic priorities. The new Kentucky Accountability Model is titled Next-Generation Learners Accountability Model.

### **Rationale for Approach**

Attainment Tasks and the Transition Attainment Record rating scale formats were chosen in an effort to mirror instruction related to the Common Core State Standards while simultaneously recording student assessment results. Unlike regular multiple choice assessments where most students independently respond to assessment items, assessment formats for alternate assessments are heavily dependent on teacher intervention. As such, minimizing the assessment burden on teachers is especially important. Because each teacher may have up to 14 students to assess at different grade-levels, it is important to minimize the assessment burden but improve the quality of the results. It is anticipated that the combined assessment tools, Attainment Tasks, and Transition Attainment Record will require no more than one hour per student to administer.

### **Next-Generation Learners Accountability Model**

The next-generation learners' accountability model is anchored in college and career readiness for all students. Like previous accountability models, it continues annual public reporting of disaggregated student outcome measures in math, reading and science to assess school performance.

However, this more robust next-generation model also includes student achievement growth measures, emphasis on college and career readiness, high school graduation rates, student achievement in writing and social studies, and increased focus on the lowest-performing schools. Additionally, the new accountability model holds all schools and districts accountable for improving student performance and creates four performance classifications that determine consequences and guide interventions and supports. School and district classifications are based on the following measures:

- Achievement (content areas are reading, mathematics, science, social studies and writing.)

- Gap (percentage of proficient and distinguished) for the Non-Duplicated Gap Group for all five content areas
- Growth in reading and mathematics (percentage of students at typical or higher levels of growth)
- College Readiness as measured by the percentage of students meeting benchmarks in three content areas on EXPLORE at middle school, College/Career-Readiness Rate as measured by ACT benchmarks, college placement tests and career measures
- Graduation Rate

The Alternate K-PREP model aligns with the model and features identified in the Next Generations Learners Accountability Model. The following charts identify how these components are represented for both the Alternate K-PREP and the regular assessments.

## Next-Generation Learners Inclusion of Alternate Assessment Student Scores

	ELEMENTARY	MIDDLE SCHOOL	HIGH SCHOOL
<b>ACHIEVEMENT</b> N= Novice A= Apprentice P= Proficient D= Distinguished	<b>NAPD</b> scores from Attainment Tasks in reading, mathematics, science, social studies and writing are included in a school's and district's Achievement reporting.		
<b>GAP</b> Used in calculation: P= Proficient D=Distinguished	Students in the Gap group scoring proficient and distinguished on Attainment Tasks in reading, mathematics, science, social studies and writing are reported in school and district Gap reporting. <i>(Note: Each Alternate Assessment student has an Individualized Education Program (IEP) and is included in the GAP student group.)</i>		
<b>GROWTH</b> Used in calculation: Student growth percentiles	Student scores from reading and mathematics Attainment Tasks are used to generate a Student Growth Percentile to include in Growth Reporting.		Transition Attainment Record results for reading and mathematics from grades 10 and 11 are used to generate a Student Growth Percentile to include in Growth Reporting.
<b>COLLEGE/CAREER READINESS</b> Used in calculation: Percentage of students career ready	N/A	Benchmarks from Transition Attainment Record at grade 8 will be used for career measure. **English/Reading-18 Mathematics-16	Benchmarks from Transition Attainment Record at grade 11 will be used for a career measure. **English/Reading-19 Mathematics-16
<b>GRADUATION RATE</b> Used in calculation: Students enrolled and students earning diplomas	N/A	N/A	Students are included in Averaged Freshman Graduation Rate calculation. Federal guidelines do not identify an Alternate Assessment student as meeting requirements for a regular diploma.

**\*\* Transition Attainment Record: Reading score represents both English and reading content areas.**

LEVELS COMPONENTS			
	ELEMENTARY	MIDDLE	HIGH
<b>ACHIEVEMENT</b> Used in calculation: N= Novice A= Apprentice P= Proficient D=Distinguished	NAPD scores from K-PREP (blended CRT/NRT tests) in reading, mathematics, science, social studies and writing are included in a school's and district's Achievement reporting		Multiple-choice and constructed-response items will be combined and cuts for NAPD set for K-PREP End of Course exams in Algebra II, English 10, Biology and U.S. History.
	Achievement calculation at all grade spans (elementary/middle and high) is one point for each percent of students scoring at distinguished and proficient, one-half point for apprentice, and novice receives no points. A bonus is added if there are more distinguished than novice. The difference between the two performance levels is added as a bonus.		
<b>GAP</b> Used in calculation: P= Proficient D=Distinguished	The percent of students in the non-duplicated Gap group scoring proficient and distinguished on K-PREP (3-8, high school) in reading, mathematics, science, social studies and writing are included in school and district Gap reporting.		
<b>GROWTH</b> Used in calculation: Student growth percentiles	Student scores from reading and mathematics test K-PREP at grades 3-8 are used to generate a Student Growth Percentile for reporting Growth. Growth is reported for grades 4-8.		Student scores from reading and mathematics on PLAN (grade 10) and the ACT (grade 11) are used to generate a Student Growth Percentile.
	The Growth calculation at all grade spans (elementary/middle/high) is one point for each percent of students scoring at or above the 40 <sup>th</sup> percentile that defines typical or higher yearly growth. Student Growth Percentile compares an individual student score to the student's academic peers (those that score like the student).		
<b>COLLEGE/CAREER READINESS</b> Used in calculation: Percentage of students college ready, career ready or both (college and career ready)	N/A for elementary level	Percent of students at grade 8 meeting ACT EXPLORE benchmarks in reading (15), English (13) and mathematics (17). Percent of students meeting benchmarks in each content area is averaged.	<u>College Ready:</u> Benchmarks on ACT, COMPASS or KYOTE. <u>Career Ready:</u> Academic—(ASVAB or WorkKeys) and Technical—(KOSSA or Industry Certificate) <u>Bonus:</u> College Ready Academic and Career Ready Technical

<b>GRADUATION RATE</b> Used in calculation: Students enrolled and students earning diplomas	N/A for elementary level	N/A for middle level	Averaged Freshman Graduation Rate (AFGR) used.
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## Chapter 2: Who are the Students?

### Description of the Assessed Population

The following participation criteria were adopted in 2009 and are now included in *Kentucky Statutes*. However, in addition to these participation guidelines, the Kentucky Department of Education with the assistance of the National Alternate Assessment Center (NAAC) conducted a survey of learner characteristics for the assessed population since the 2005-06 administration cycle. This section describes the population of students participating in the alternate K-PREP, the participation guidelines, the rate of participation, and the characteristics of the students who participate in the assessment (Kearns, Towles-Reeves, Kleinert, and Kleinert 2006).

### Participation Guidelines

The IEP team considers a set of participation guidelines as they determine how a student with an IEP will participate in the assessment and accountability system. These guidelines indicate that students who participate in the alternate assessment will receive an alternate diploma. The purpose for this inclusion was to keep the population in this assessment at or below 1% of the total assessed population. As such it is important to emphasize, that while the rate of students taking the alternate assessment has grown in the last few years, Kentucky still reports well below 1% of the total population at or above proficiency. With these factors in mind the participation guidelines for the *Alternate K-PREP* require IEP teams to consider and answer “yes” to **ALL** of the following indicators:

1. Student’s Individual Education Program is current.
2. Has the student’s current level of communication been determined through observations and evaluations?
3. Current and longitudinal data across settings in all academic areas include progress in monitoring (IEP data and progress in general education curriculum) AND adaptive behavior(s) have been reviewed and documents the ARC decision.
4. Demonstrates cognitive ability and adaptive behavior which prevent completion of the Program of Studies without modifications that exceed the accommodations allowed in the general assessments as described in the *Inclusions Document* and set forth in 703 Kentucky Administrative Regulation (KAR) 5:070.
5. The student’s inability to complete the Program of Studies is not the result of excessive or extended absences, or primarily the result of visual or auditory disabilities, emotional, behavioral disabilities, specific learning disabilities, communication disorder, or social, cultural, and economic differences and those identified as English Language Learners (ELL).
6. Current adaptive behavior requires extensive, individualized direct instruction across multiple settings, utilizing intensive accommodations, modifications and assistive technology to access the Program of Studies.



Because the participation rate has remained fairly constant and well below the acceptable rate of proficient scores, no additional monitoring of these participation rates has occurred.

### Participation Rate

The total participation rate in the KY Alternate Portfolio Assessment through 2006 remained at or below 1% of the total assessed. Since 2006, the percentage of students participating in the alternate assessment has increased slightly, but still remains well below the acceptable rate of proficient scores. The chart in Figure 2 illustrates the number of participating students in the alternate assessment (grades 3-8, 10, 11 and 12). The increase in participating students in the 2012, results from adding an additional grade to the accountability model.

**Figure 2: Number & Percentage of Students Assessed in Alternate Assessment**

	2012	2011	2010	2009	2008	2007	2006
# of Students	5,309	4,748	4,832	4,844	4,748	4,896	1392
% Students Assessed in AA-AAS	1.34%*	1.08%*	1.11%*	1.12%*	1.10%*	1.14%*	1.02%*

*\*- These figures represent total population and do not impact federal guidelines that state no more than 1% of the student population can report at proficient or higher.*

The percentage of students who participated in the 2011-2012 Alternate K-PREP by grade is as follows:

- 3<sup>rd</sup> grade .93%
- 4<sup>th</sup> grade 1.03%
- 5<sup>th</sup> grade 1.14%
- 6<sup>th</sup> grade 1.01%
- 7<sup>th</sup> grade 1.04%
- 8<sup>th</sup> grade 1.15%
- 9<sup>th</sup> grade 1.11%
- 10<sup>th</sup> grade 1.13%
- 11<sup>th</sup> grade 1.14%
- 12<sup>th</sup> grade 1.21%

While 1.34% of the total student population participated in the 2011-2012 Alternate K-PREP, only 0.4% of the total student population returned Proficient or Distinguished Alternate K-PREP scores, remaining well below the 1% guideline.

### Characteristics of Student Population

Beginning in the 2005-06 administration of the KY Alternate Assessment Portfolio and continuing through the current administration, KDE has administered the NAAC *Learner*

**Characteristics Inventory (LCI)** (Kearns, Towles-Reeves, Kleinert, & Kleinert, 2006). This instrument was designed for the explicit purpose of better describing and monitoring the participation of students with certain learner characteristics. The inventory samples expressive and receptive communication, mobility, engagement, vision, hearing, attendance, as well as one reading and one math item. Recently, Kentucky has decided to only measure the communication components of the LCI. Figures 3, 4, and 5 show the findings.

**Figure 3 – Expressive Communication**

<b>Expressive Communication</b>			
Year	Uses symbolic language to communicate: Student uses verbal or written words, signs, Braille, or language-based augmentative systems to request, initiate, and respond to questions, describe things or events, and express refusal. (Level 1)	Uses intentional communication, but not at a symbolic language level: Student uses understandable communication through such modes as gestures, pictures, objects/textures, points, etc., to clearly express a variety of intentions. (Level 2)	Student communicates primarily through cries, facial expressions, change in muscle tone, etc., but no clear use of objects/textures, regularized gestures, pictures, signs, etc., to communicate. (Level 3)
<b>2008-2009</b>	76.63%	13.90%	9.08%
<b>2009-2010</b>	76.66%	13.68%	9.50%
<b>2010-2011</b>	80.45%	11.12%	8.43%
<b>2011-2012</b>	79.91%	12.02%	8.07%

**Figure 4 – Receptive Communication**

<b>Receptive Communication</b>				
Year	Independently follows 1-2 step directions presented through words (e.g. words may be spoken, signed, printed, or any combination) and does NOT need additional cues. (Level 1)	Requires additional cues (e.g., gestures, pictures, objects, or demonstrations/models) to follow 1-2 step directions. (Level 2)	Alerts to sensory input from another person (auditory, visual, touch, movement) BUT requires actual physical assistance to follow simple directions. (Level 3)	Uncertain response to sensory stimuli (e.g., sound/voice; sight/gesture; touch; movement; smell). (Level 4)
<b>2008-2009</b>	49.42%	39.84%	7.84%	2.64%
<b>2009-2010</b>	47.74%	41.12%	8.40%	2.64%
<b>2010-2011</b>	59.67%	31.01%	7.02%	2.30%
<b>2011-2012</b>	56.87%	34.02%	6.75%	2.36%

**Figure 5 – Augmentative Communication**

<b>Does the Student Have an AAC Device?</b>		
Year	Yes	No

<b>2008-2009</b>	13.94%	85.83%
<b>2009-2010</b>	14.70%	85.23%
<b>2010-2011</b>	14.76%	85.24%
<b>2011-2012</b>	13.93%	86.07%

## **Implications for Participation Criteria**

Even though the percentage of students using an alternate augmentative communication device has remained relatively stable across the past four years, there have been consistent increases in the use of both expressive and receptive communication at the highest level and corresponding decreases at the lower levels, indicating a slightly positive trend in the data.

Communication is essential for the development of skills in reading and mathematics. A review of literature in the role of language development and reading was considered when making decisions about the population of students who participate in the Alternate Achievement Standards Assessments.

As a result of this information, separate criteria were designed to accommodate learners with the least communication skill. Students who demonstrate low levels of receptive language and inconsistent levels of expressive communication could have considerable difficulty responding to the assessment targets and achieving a consistent level of challenge that is required by the other 93% of the assessed population. This could represent an assessment bias to a subset of the assessed population. To mitigate this difficulty, a second performance dimension was added to the administration protocol beginning in the operational pilot of the 2006-07 accountability cycle. Students, who meet these additional eligibility criteria as determined by the IEP team, have fewer response options presented during Attainment Task administration. The student's participation dimension decision is made based on the following items from the participation guidelines.

1. The IEP team must select one of the following: Performance Dimension A or Performance Dimension B based using the specified indicators.

**Performance Dimension A: Attainment *should*** be chosen if the student's communication is best described by the following indicators:

Student uses verbal or written words, signs, Braille, or language-based augmentative systems to request, initiate, and respond to questions, describe things or events, and express refusal. OR

Student uses intentional communication, but not at a symbolic language level: Student uses understandable communication through such modes as gestures, pictures, objects/textures, points, etc., to clearly express a variety of intentions.

**Performance Dimension B: Progress *may*** be chosen if the student's communication is best described by the following indicators. No distinguished scores are available if this performance dimension is chosen.

Student communicates primarily through cries, facial expressions, change in muscle tone but no clear use of objects/textures, regularized gestures, pictures, signs, etc., to communicate.

Student alerts to sensory input from another person (auditory, visual, touch, movement) BUT requires actual physical assistance to follow simple directions. Or the student's response to sensory stimuli (e.g., sound/voice; sight/gesture; touch; movement; smell) is unclear.

## **CHAPTER 3: WHAT IS THE CONTENT?**

### **Academic Content Identification and Link to Grade-Level Standards**

Kentucky's alternate assessment is currently aligned to Kentucky Core Academic Standards (KCAS) which were developed from the Common Core State Standards (CCSS) for English Language Arts (ELA) and Mathematics, and the Kentucky Program of Studies (2006)/Core Content for Assessment (4.1) standards in Science and Social Studies. Because Kentucky's science and social studies standards have not changed, standards previously selected during the content mapping process for the revised portfolio remain in place. Content experts and low incidence specialists worked together to review the Common Core State Standards for English Language Arts (ELA) and Mathematics. In an attempt to reduce the breadth of content assessed for this population content experts and low incidence specialists reviewed the full range of ELA and Mathematics content, and identified a subset of 10 consensus standards for Reading, Writing and Mathematics.. In each content area (ELA and Mathematics) the following three prioritizing questions guided these decisions:

- 1) Is the standard and/or critical function required for future learning in the content area?
- 2) Is the standard and/or critical function needed in the next age appropriate environment?
- 3) Is the standard and/or critical function required for participation in a variety of practice communities?

The 10 consensus standards in Reading, Writing, and Mathematics were posted on-line and stakeholders were asked to identify the top six standards in terms of saliency to the content and student population. All standards were reviewed and stakeholders ranked their selection of six standards. The top ranking six standards overall for each content area were considered the consensus standards for the Alternate K-PREP test blueprint.

The final set of six consensus standards were reviewed by the alternate assessment advisory board and then posted on the internet to receive public comments.

Historically, in science five standards had been assessed and in social studies four standards had been assessed. While awaiting new national standards in science and social studies, Kentucky maintains the original standards. Each content area (Reading, Mathematics, Writing, Science and Social Studies) assesses 30 items (six tasks of five items each).

### **Reducing Breadth and Depth of CCSS**

The Alternate K-PREP test blue print reduces the breadth of the content through the selection of six standards per content area in Reading, Mathematics, and Writing, five in Science, and four in Social Studies. This does not imply that instruction is not to be delivered on all content standards; rather it focuses the test blueprint on those concepts that have been identified as essential knowledge for students. To further focus the test blueprint, general education teachers, special education teachers and administrative stakeholders were convened to examine the six content standards selected in reading, writing, and mathematics at each grade level and asked to identify the "Big Idea" or "Enduring Understanding" of each standard. Their conclusions

clarified the test blue print by identifying which components of the standard might be assessed.  
See Appendix B for Grade Level Test Blue Print.

## **Chapter 4: Test Development**

### **Test Development**

Item writers were hired and trained to write scripted Attainment Tasks that aligned to the selected content standards. Each task contained five related multiple choice items based on a scenario presented at the beginning of the task. Illustrated response options are presented for each of the items. The response options include two distractors, one incorrect answer and a correct answer. All attainment tasks include directions to the task administrator to facilitate and standardize the administration process. In some instances additional materials such as maps, graphs, equations, or sentence templates are provided for use in the administration of the task. In addition, Reading tasks include a passage. Every passage has a corresponding illustrated story board. The individual illustrations in the story board are numbered and these numbers are entered at the appropriate place in the passage in the form of superscript numbers to cue the administrator to present or indicate the appropriate illustration as needed.

The draft versions of the Attainment Tasks were reviewed by both a stakeholder group of general education and special education teachers and content experts at the Kentucky Department of Education (KDE) prior to the field test. The stakeholder group convened to review the tasks for bias and sensitivity (see Chapter 5 for further detail), as well as content alignment of the items, construct irrelevant variance, and other factors that might inhibit or preclude students' access to the items. In addition to the stakeholder content alignment review, KDE content experts reviewed the tasks for content alignment.

### **Field test**

In 2010-2011 a large-scale pilot test was administered for the Year One Attainment Tasks items. Subsequent items were piloted on a small scale. Draft tasks at all grade levels for each content area were distributed to Kentucky teachers with directions for administration. Teachers were asked to respond to specific questions that solicited feedback on the items and the administration process. All feedback was collected and investigated and a rationale for resulting decisions was provided to KDE along with the original feedback. Field test results, feedback, and revisions were reviewed by KDE.



## CHAPTER 5: BIAS REVIEW

As noted previously in the section entitled “Assessed Population,” the diversity of the population is such that it is necessary to consider bias in terms of specific characteristics of the population. Students with expressive and receptive language difficulties may be especially at risk for access bias. While Performance Dimension B was designed in an effort to mitigate bias toward this particular group of students.

The Attainment Tasks were written by year one and year two to create a bank of test items. For each year of Attainment Tasks, a bias and sensitivity review was conducted. Bias is defined as non-curriculum-relevant factors that tend to lower scores of an identifiable group of students that can be investigated statistically.

- To determine statistical bias, one compares the performance on individual items for students of similar ability.

Sensitivity is defined as non-curricular-relevant issues that may offend or dismay significant numbers of students, teachers or parents.

Stakeholders made up of general education teachers, special education teachers and administrators from across the state came together to review the items. All stakeholders received training about content bias and sensitivity prior to beginning the process. Stakeholders were asked to review items to ensure that:

- The content of the text was provided with a fair opportunity to demonstrate what they know, regardless of their race, ethnicity, gender, religion, disability, socioeconomic status, or geographic region in which they live
- The content of the text did not intrude on the privacy of the values and beliefs of students or their families, or offend students, parents, or the public of Kentucky
- Any text that focuses on one group within Kentucky’s diverse population, approached issues and/or themes in a manner that does not demean, offend, or inaccurately portray any race, ethnicity, religious group, disability, culture, gender, social group, or region
- Tasks avoided topics that arouse strong emotions unless those topics are curriculum relevant
  - Interfere with students understanding of the question
  - Interfere with student performance
  - Serve as a lightning rod to critics
  - Confuse the messages about what the assessment program is about

Stakeholders also considered the following questions:

- What is being assessed with this question?
- Are there alternative assessment questions that do not include sensitive issues?
- Is this a topic that should be used to test content on a state assessment?
- How might this passage affect a child who has recently had a personal experience with this subject (e.g., a child, who has recently experienced the death of a close family member or a friend is asked to react to a poem about death, or a homeless child reads a passage homelessness)?
- Will the passage be perceived as biased or offensive?
- Is the treatment of the topic in the passage appropriate for the age level of the student?

## **CHAPTER 6: ALIGNMENT**

### **Relationship of Grade-Level Content and Content for AA-AAS**

This process is described in Chapter 3. The content selected for the alternate assessment is reduced in breadth and depth. The content selection committees felt this was necessary in light of the lack of well documented academic progression for these students.

### **Relationship of the Content to the Achievement Standards**

Content Committee meetings were conducted for the purpose of developing performance level descriptors for reading, writing and mathematics at grades 3–8 and high school. Members were reconvened to determine performance level descriptors for science in grades 4, 7, and 11 and social studies in grades 5, 8, and 12.

The committee members were divided into three grade-band groups at elementary, middle and high school in reading and mathematics with each group responsible for performance level descriptors for each individual grade at that level. Each group had general education and special education teachers and content experts.

Each content area and grade level committee members were given the standards, which were prioritized by Kentucky stakeholders and the related assessment items. They were instructed to review the standards and items, keeping in mind the following overall goals:

- Represent the highest standard possible for this population of students
- Use the language of the content in reading and math
- Minimize bias to any one particular group of students

**Performance-Level Descriptors** - Performance level descriptors were written to reflect the content performance requirements. These descriptors list skills and concepts that a student who barely meets a particular performance level (Novice, Apprentice, Proficient or Distinguished) is able to demonstrate. The Performance Level Descriptors can be found in **Appendix C**.

## CHAPTER 7: ADMINISTRATION & TRAINING

### Procedures for administering the assessment

The task must be administered in a one to one situation with the student in a setting free of distractions. The room should be free of other students or in an area of the classroom that:

- does not distract the student and
- does not allow other students to hear the student's answers.

The task must be administered by a certified staff member (e.g., teacher, counselor, related service provider, etc.). The test administrator must qualify by completing the Attainment Task online training and complete the qualifying quiz. A copy of the completed quiz must be placed in the AAAP. For further information about what belongs in the AAAP, please see AAAP Training on KDE's website.

The task is scripted and is to be read to the student as written or using acceptable adjustments as described in the *Steps to Administering* section. "Quotation marks" signify the scripted portions to be read to the student.

The task may be administered in more than one session, allowing for a smaller amount of time for each session. A five minute break between each section of the task is **OPTIONAL** this year, but only one content area may be administered to an individual student each day. Breaks will be noted in the testing materials. If a student is having difficulty attending, is having medical or behavioral difficulties, the task can be stopped within a section. Resume the task at the point stopped during the prior session. **DO NOT** start over. The administrator can orient the student to where he or she was in the process. For example, the teacher could say, "Last time we looked at food items and compared them. Now we are going to..." **No re-teaching** should occur between these sessions. Store the Attainment Tasks in a secure location when not testing.

### Steps to Administering

1. Read the Attainment Task administration guide.
2. Review the Resource Guide and each content area Glossary of Terms in the Resource Guide.
3. Complete the online training module and review any supplementary materials.
4. Complete the qualification test. Place evidence of qualifying (e.g., online notice, email, etc.) in the AAAP. It is important to enter the correct email address when submitting the quiz.
5. Sign a Code of Ethics and file in the AAAP. Each person assisting with the Attainment Tasks must sign a Code of Ethics and file in the student's AAAP.
6. Non-school personnel who assist with any administration of the assessment must also sign a non-disclosure form and file in the AAAP.
7. Preview the task and the accompanying materials and prepare for administration (e.g., gathering materials, gaining familiarity with all vocabulary
8. Make modifications to materials to ensure accessibility to individual students. Refer to the Accommodations section for important information regarding appropriate use. The accommodations may include but are not limited to:

- enlarging or coloring pictures and text,
- creating a high contrast version of the pictures/symbols, and
- using objects to represent answers and distractors.

9. Read the script, signified by “quotation marks” exactly as written with the following acceptable adjustments:

- Replacing a word that is not a *key* content word (e.g., resources, government, elements of music, etc.).
- Replacing a word when the alternate word does not change the context (e.g., changing “*describe* the bike” to “*tell* about the bike” would be acceptable; changing “*describe* the bike” to “*identify* the bike” would not be acceptable).
- Replacing a word when the alternate word does not provide the answer or lead the student to the answer (e.g., if the question was “what instrument did the girl play?” then changing “instrument” to “flute” would provide the answer and therefore would not be acceptable; however, the question “why is the girl playing the instrument?” could be changed to “why is the girl playing the flute?”).
- The script can be repeated when needed. Paraphrasing can be used in addition to the prescribed flexibility for all students if it is specified in the student’s IEP. Paraphrasing includes repeating or rephrasing the script, directions, prompt, or situation. This shall include breaking directions and sentences into parts or segments or using similar words or phrases, but shall not include defining words or concepts or telling a student what to do first, second, etc.

10. Follow directions included in the script to guide the process. The directions will be signified by an *italics* font and will include:

- what materials to present to the student at specified times (e.g., present the writing template labeled Thanksgiving Dinner Story) and
- instructions on the level of support allowable by the teacher.
- If pictures are cut apart, they must be presented to the student in the original order. The answer choices can be placed horizontally, vertically, in corners (eye gaze board), etc. as long as the choices are given in the same order as provided in the testing material (e.g., left to right, top to bottom, etc.).

11. Words in the questions that are underlined and bolded are to be emphasized for the student (e.g., **not**, **best**, **most**, **likely**, etc.).

12. Allow the student to independently respond to each task item and record the accuracy of the independent response on the accompanying answer sheet.

13. If a task has materials listed on the cover page of the assessment, all supplemental materials are found at the end of the task (e.g., after question five).

14. All task questions are provided on a single page at the end of the task. These questions are for student use and can be covered, cut apart, and used as needed for student comprehension.

## **Teacher Training**

All teachers must complete the Administration Code Inclusion training, and alternate assessment trainings following state and district procedures. A mandatory online training and qualifying quiz is required of all certified personnel who plan to administer the Alternate K-PREP. There is an administration guide, training and qualifying quiz for three different components of the Alternate

K-PREP system; Administration Overview, Attainment Task Administration, and Transition Attainment Record Administration. The trainings and manuals are all available as downloadable on-line resources. Once the materials are posted, they remain on-line for the remainder of the accountability cycle.

### **Administration Quality Control**

#### **Alternate Assessment Accountability Folder (AAAF)**

As part of the Alternate K-PREP, the Kentucky Department of Education (KDE) shall require each teacher to maintain a AAAF folder for each student participating in the Alternate Assessment. This folder will support the submitted alternate assessment samples and can be used by KDE for potential audits and observations of student work. The contents of the AAAF are expected to address all the alternate assessment requirements for the student's grade level. Items that should be included in the AAAF are as follows:

- Student Information Page
- Teacher Code of Ethics
- Teacher Quiz Certifications

#### **ATTAINMENT TASKS DOCUMENTATION:**

- Work samples (Reading, Mathematics, Writing and Science 1, 2 and 3) (Social Studies 1 and 2). WORK SAMPLES MUST INCLUDE THE FOLLOWING:
  - Name
  - Date
  - Grade
  - Content Area Standard (ex: 4.1 Grade 4 standard 1)
  - Score
- Scores from Test Window 1 and Supports Sheet
- Scores from Test Window 2 and Supports Sheet
- Anecdotal Notes

#### **TRANSITION ATTAINMENT RECORD (TAR) DOCUMENTATION:**

(TAR APPLIES TO STUDENTS IN GRADES 8, 10 and 11 ONLY)

- Documentation concerning meeting held to complete the record (i.e., who, where, and when)
- Anecdotal Notes
- Location where the supporting documentation is stored (e.g., IEP data in Due Process Folder)

## CHAPTER 8: SCORING

### Student Registration Database (SRD)

Student responses for the alternate assessment attainment tasks in reading, writing, mathematics, science and social studies are entered into the SRD and a raw score is derived. Scores are reported based on cut scores determined during the Standard Setting process (described in Chapter 11).

**Figure 6 Scoring Distribution for the 2011-12 Accountability Cycle**

<b>Content</b>	<b>Grade</b>	<b>N %</b>	<b>A %</b>	<b>P %</b>	<b>D %</b>
Reading	3	25.7	43.2	23.4	7.6
	4	24.2	47.2	23.8	4.9
	5	25.9	50.3	20.2	3.6
	6	32.0	46.1	18.6	3.3
	7	37.9	38.8	17.9	5.4
	8	31.7	46.3	16.0	5.9
	9	33.7	47.5	16.8	2.1
<b>Content</b>	<b>Grade</b>	<b>N %</b>	<b>A %</b>	<b>P %</b>	<b>D %</b>
Mathematics	3	26.2	42.6	24.5	6.8
	4	25.9	51.5	18.3	4.3
	5	27.6	50.6	20.1	1.7
	6	28.1	43.8	24.4	3.7
	7	38.1	40.6	17.5	3.8
	8	36.6	42.2	19.0	2.3
	10	38.3	41.0	18.4	2.3
<b>Content</b>	<b>Grade</b>	<b>N %</b>	<b>A %</b>	<b>P %</b>	<b>D %</b>
Science	4	27.5	46.6	20.5	5.5
	7	34.8	42.3	16.5	6.3
	11	22.2	50.5	23.3	4.0
<b>Content</b>	<b>Grade</b>	<b>N %</b>	<b>A %</b>	<b>P %</b>	<b>D %</b>
Social Studies	5	29.3	43.6	20.9	6.2
	8	34.8	39.7	22.1	3.3
	12	31.7	44.0	19.8	4.4
<b>Content</b>	<b>Grade</b>	<b>N %</b>	<b>A %</b>	<b>P %</b>	<b>D %</b>
Writing	4	29.8	48.9	19.1	2.1
	5	32.6	43.6	20.1	3.8
	6	36.8	45.0	16.3	1.9
	8	37.3	40.2	18.8	3.7
	10	28.8	46.6	21.4	3.0
	11	24.9	50.5	22.4	2.3

## **CHAPTER 9: CHARACTERIZING ERRORS ASSOCIATED WITH TEST SCORES**

### **Administration Errors**

As a result of the individualization that must occur for some students, error can be introduced. The requirement for training and introduction of a technical support network are supports provided by the Kentucky Department of Education in the implementation of the assessment. A mandatory online training and qualifying quiz is required of all certified personnel who plan to administer the Alternate K-PREP. An Overview Administration Manual, Attainment Task Administration and Transition Attainment Record Administration Manual are all also available as downloadable online resources.

### **Resource Materials**

All resources and the narrated online training modules are continually available through web-based resources. As a result of teacher feedback, a resource guide was provided for the 2012-2013 assessment cycle in an effort to assist teachers in translating the standards and providing content specific illustrations that are used in the assessment.

### **Audit Verification**

A purposeful and random sample of assessments is selected for an external audit of working documentation for each accountability cycle. The purpose of this audit is to verify student performance through other sources of instructional documentation, such as observation errors, items/tasks, and consistency of the student's responses. The AAAP and student's working folder provide much of this information, and both will be reviewed if a student, school or district is randomly selected for an audit.

## **CHAPTER 10: COMPARABILITY STUDY**

Using stakeholder feedback, changes to the Attainment Tasks were made to reduce memory load and facilitate administration of the Attainment Tasks. The alterations to the structure and content of the tasks were significant enough to warrant a full standard setting process after year two administration. Given this, Kentucky will conduct a comparability study between years two and three using the following process.

### **Comparability Study Methodology**

Using a judgmental process for comparability stakeholders will independently rank assessment items of a practice set from easiest to hardest. Features of difficulty include vocabulary, materials, activity, and memory load. Once ranking have occurred, stakeholders will independently estimate the percentage of students in the population whom they expect to receive a score of 1 (attained) on each item of that practice set. Then as a group, they will discuss their rankings and estimations. Upon completion of the practice set, stakeholders will repeat the process using the 2012-2013 and 2013-2014 items. Once the ranking and estimations are complete, a statistical comparison of the rankings will be run to determine the level of comparability between the two accountability cycles.

### **Selection of Comparability Study Participants**

The comparability study participants will be selected from a pool of qualified content experts in reading, writing, mathematics, science and social studies and special education teachers who are knowledgeable and have direct experience with the range of students who participate in the Alternate Assessment. Teachers and content experts may nominate themselves or be nominated by their principal, special education director, superintendent or other knowledgeable official. Each nominee must be a current LEA or SEA employee with verifiable experience. Participants will be selected based on geographic representation, age/grade experience and overall experience in teaching the population.

### **Training of Comparability Study Participants**

The comparability study team will receive training about the alternate assessment, the population and the content prior to engaging in comparability study process.



## **CHAPTER 11: STANDARD SETTING**

### **Standard Setting Methodology**

A *Modified Angoff* standards setting (Angoff, 1971) method in which stakeholders use their professional judgment to determine how much is just enough for a student to be considered “barely apprentice,” “barely proficient,” or “barely distinguished” was used to set the standards for the Attainment Tasks. Participants utilized the Performance Level Descriptors and the Attainment Task Items to make these determinations.

The standard setting process was broken into three rounds. In the first round, each participant reviewed each item and answered “yes” or “no” that of 100 students who are “barely proficient” the majority would be able to respond correctly to that item. Once the stakeholder reviewed each item for “barely proficient,” he or she went on to rate each item for the “barely apprentice” and the “barely distinguished” student. Once all stakeholders reviewed all items at a specific grade level for all three performance levels, the facilitator led a group discussion about how the items were rated. The stakeholders discussed the items. For round two, the stakeholders repeated the steps of round one. During the discussion of round two, stakeholders make recommendations about the number of items required for each performance level. The group did not have to have consensus, but rather a majority of the group needed to agree. During round three, the stakeholders viewed impact data based on the recommended cut scores and had an opportunity to discuss one more time. The group made final recommendations of cut scores at that grade level and moved on to the next grade level in their grade band.

### **Selection of Standard Setting Participants**

The standard setting participants were selected from a pool of qualified content experts in reading, writing, mathematics, science and social studies and special education teachers who are knowledgeable and have direct experience with the range of students who participate in the alternate assessment. Teachers and content experts could nominate themselves or be nominated by their principal, special education director, superintendent or other knowledgeable official. Each nominee had to be a current LEA or SEA employee with verifiable experience. Participants were selected based on geographic representation, age/grade experience and overall experience in teaching the population.

### **Training of Standard Setting Participants**

The standard setting team received training about the alternate assessment, the population and the content prior to engaging in the standard setting process.

## **CHAPTER 12: REPORTING**

Reports are disseminated at the student, building, LEA and SEA levels as described in section four of the Kentucky Performance Rating for Educational Progress (K-PREP) 2011-2012 Technical Manual prepared by Pearson.

## **CHAPTER 13: INTRODUCTION OF THE VALIDITY FRAMEWORK AND ARGUMENT**

A Theory of Action (TOA) was developed to focus elements for the validity argument. The TOA displays the claims that will be made about the system and is divided into components that are the focus of the Alternate K-Prep including instructional context, assessment design, implementation and appropriate use of results – that lead to short-term assessment outcomes and long-term student outcomes.

The TOA starts with the assumption that there are pre-requisites to delivering quality instruction to students with significant cognitive disabilities that is linked to grade specific academic standards. In order for the assessment system to produce valid and useful results, students participating in the AA-AAS must be appropriately identified, their instruction must be aligned with the content assessed, and the AA-AAS must be administered as intended.

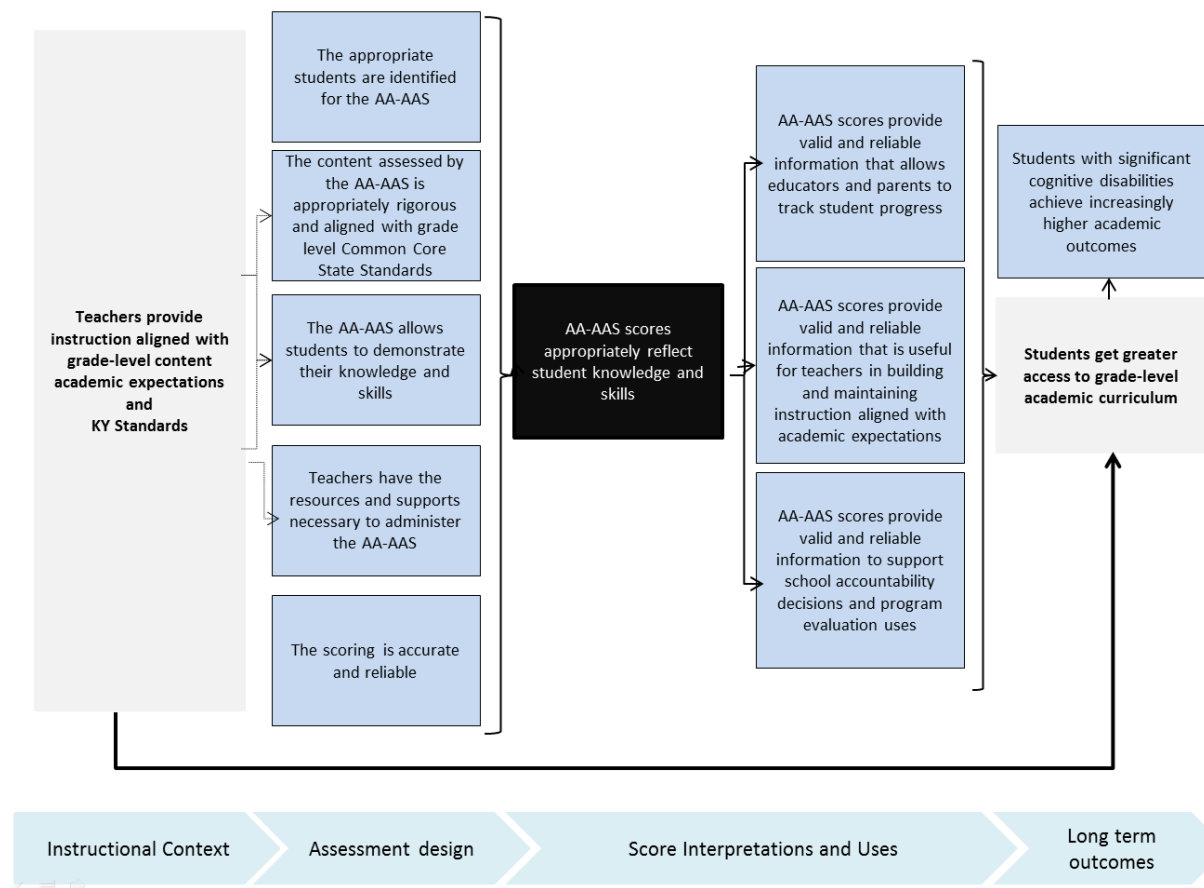
Having made these claims, the assessment design is addressed. The design must match the learning characteristics and communication needs of the students who participate, while maintaining appropriately rigorous academic content. The claims about the AA-AAS include the technical defensibility of content and construct validity, and results that reflect student knowledge and skill. Student scores should provide useful information for teachers to inform instruction, and for parents to track progress. The assessment system is anchored in the long-term goals that students with significant cognitive disabilities should achieve increasingly higher academic outcomes and leave high school ready for post-secondary options (5<sup>th</sup> column in \_\_\_\_).

The TOA will serve as the foundation for the validity evaluation work which will identify and confirm priorities and designs for studies that address each of the four of the major aspects of validity:

- 1) Test content – for example, an alignment study will be conducted as part of the validity evaluation;
- 2) The response processes – for example, cognitive laboratory studies to identify how students engage with and solve problems posed in assessment items;
- 4) Relationships with other variables – for example, comparisons of student achievement scores or ratings based on other data sources;
- 5) The consequences of assessment processes and scores – for example, evaluations of classroom instruction to determine the degree to which academic content is being addressed.

See Illustration 1 for graphic illustration of the Theory of Action.

**Illustration 1**



## Learner Characteristics Studies

The LCI data were used to identify the extent to which students with certain learner characteristics groups receive low or high scores. Findings of this analysis indicate that the score range (N, A, P, D) is represented for all levels of receptive and expressive language. See Appendix D for graphs illustrating this performance range.

## Concurrent Student Work Audit

A random and purposeful audit of student working documents will be compared to the assessment results. Comparisons will include the extent to which the assessment targets match, progress data patterns are evident, and work samples represent response similarities for individual students. Much of the comparisons will come from the AAAF and student's working folder.

## Appendix A: Participation Guidelines

**Enter District Name Here**

(Attachment to the Student's IEP and the ARC Conference Action Form)

Student's Full Name:	SSID:
Disability:	Grade:
Date of Birth:	Date of ARC:
Date ARC accepted Student Participation in Alternate Assessment:	
Date of Annual Participation Evaluation Review: (Must occur within 12 months of 'Date ARC accepted Student Participation in Alternate Assessment' above.)	
School:	

The ARC determines a student eligible for participation in alternate assessment when the following		
Indicate all available accommodations to be used as part of the student's daily learning strategies by checking the boxes		
<input type="checkbox"/> Readers	<input type="checkbox"/> Scribe	<input type="checkbox"/> Paraphrasing
<input type="checkbox"/> Positive Behavior	<input type="checkbox"/> Use of Technology	<input type="checkbox"/> Manipulatives
<input type="checkbox"/> Interpreters	<input type="checkbox"/> Extended Time	<input type="checkbox"/> Other (Specify below)
If Other is checked above specify here:		
<input type="checkbox"/> Y <input type="checkbox"/> N	1.	Student's Individual Education Program is current
<input type="checkbox"/> Y <input type="checkbox"/> N	2.	Has the student's current level of communication been determined through observations and evaluations?
Performance Dimension A: <b>Attainment</b>	<input type="checkbox"/>	Student uses verbal or written words, signs, Braille, or language-based augmentative systems to request, initiate, and respond to questions, describe things or events, and express refusal.
	<input type="checkbox"/>	Student uses intentional communication, but not at a symbolic language level: Student uses understandable communication through such modes as gestures, pictures, objects, textures, points, etc. to clearly express a variety of intentions.
Performance Dimension B: <b>Progress</b>	<input type="checkbox"/>	Student communicates primarily through cries, facial expressions, change in muscle tone but no clear use of objects/textures, regularized gestures, pictures, signs, etc. to communicate.
	<input type="checkbox"/>	Student alerts to sensory input from another person (auditory, visual, touch, movement) BUT requires actual physical assistance to follow simple directions. Or the student's response to sensory stimuli (e.g., sound/voice; sight/gesture; touch; movement; smell) is unclear.

<input type="checkbox"/> Y <input type="checkbox"/> N	3.	Current and longitudinal data across settings in all academic areas include progress in monitoring (IEP data and progress in general education curriculum) AND adaptive behavior(s) have been reviewed and documents the ARC decision.
---	----	--

Indicate data sources and dates below				
<input type="checkbox"/> Y <input type="checkbox"/>	Current Data	School Year:		
<input type="checkbox"/> Y <input type="checkbox"/>	Longitudinal Data	School Year:		
LOCATION OF DOCUMENTATION TO SUPPORT ADMISSIONS AND RELEASE COMMITTEE DECISION (Check				
<input type="checkbox"/> Individual   Education	<input type="checkbox"/> Due Process Folder	<input type="checkbox"/> Classroom Observation	<input type="checkbox"/> Diagnostic Assessment	
<input type="checkbox"/> Informal Assessment	<input type="checkbox"/> Evidence   of	<input type="checkbox"/> Student Work Folder	<input type="checkbox"/> Other (Specify below)	
If Other is checked above specify here:				
Comments (Optional):				
<input type="checkbox"/> Y <input type="checkbox"/> N	Demonstrates cognitive ability and adaptive behavior which prevent completion of the Program of Studies without modifications that exceed the accommodations allowed in the general assessments as described in the <i>Inclusions Document</i> and set forth in 703 KAR 5:070			
LOCATION OF DOCUMENTATION TO SUPPORT ADMISSIONS AND RELEASE COMMITTEE DECISION (Check				
<input type="checkbox"/> Individual   Education	<input type="checkbox"/> Due Process Folder	<input type="checkbox"/> Classroom Observation	<input type="checkbox"/> Diagnostic Assessment	
<input type="checkbox"/> Informal Assessment	<input type="checkbox"/> Evidence   of	<input type="checkbox"/> Student Work Folder	<input type="checkbox"/> Other (Specify below)	
If Other is checked above specify here:				
Comments (Optional):				
<input type="checkbox"/> Y <input type="checkbox"/> N	The student's inability to complete the Program of Studies is not the result of excessive or extended absences, or primarily the result of visual or auditory disabilities, emotional, behavioral disabilities, specific learning disabilities, communication disorder, or social, cultural, and economic differences and those identified as English Language Learners (ELL).			
LOCATION OF DOCUMENTATION TO SUPPORT ADMISSIONS AND RELEASE COMMITTEE DECISION (Check				
<input type="checkbox"/> Individual   Education	<input type="checkbox"/> Due Process Folder	<input type="checkbox"/> Classroom Observation	<input type="checkbox"/> Diagnostic Assessment	
<input type="checkbox"/> Informal Assessment	<input type="checkbox"/> Evidence   of	<input type="checkbox"/> Student Work Folder	<input type="checkbox"/> Other (Specify below)	
If Other is checked above specify here:				
Comments (Optional):				

<input type="checkbox"/> Y <input type="checkbox"/> N	Current adaptive behavior requires extensive, individualized direct instruction across multiple settings, utilizing intensive accommodations, modifications and assistive technology to access						
LOCATION OF DOCUMENTATION TO SUPPORT ADMISSIONS AND RELEASE COMMITTEE DECISION (Check							
<input type="checkbox"/> IEP	<input type="checkbox"/> Due Process Folder	<input type="checkbox"/> Classroom Observation	<input type="checkbox"/>				
<input type="checkbox"/> Informal Assessment	<input type="checkbox"/> Evidence of Interventions	<input type="checkbox"/> Student Work Folder	<input type="checkbox"/> Other				
If Other is checked above specify here:							
Comments (Optional):							
<input type="checkbox"/> Y <input type="checkbox"/> N	<p>At this time the Admissions and Release Committee members agree that the student meets the participation guidelines for Kentucky's Alternate Assessment Program. All data sources referenced can be verified with supporting documentation. Eligibility is determined on an annual basis and <u>must</u> occur in order to determine future participation in Alternate Assessment. The student will be excluded from other state-required assessment components for the ____ school year.</p> <p><b>Should the Admissions and Release Committee determine the student continues to meet Alternate Assessment Participation Guidelines during high school, the student will be considered to be on a non-diploma track. This means the student would not be able to earn a high school diploma and would therefore receive an Alternate Diploma as stated in</b></p>						
<input type="checkbox"/> Y <input type="checkbox"/> N	<p>The Admissions and Release Committee has explained the <i>difference</i> between an <b><u>Alternate Diploma</u></b> and a <b><u>High School Diploma</u></b>.</p> <p>Parent initial: _____ ARC Chairperson initial: _____</p>						
<input type="checkbox"/> Y <input type="checkbox"/> N	<p>The parent was provided a copy of the <b><u>Alternate Assessment Parent Guide</u></b> with an opportunity to ask questions. If yes, indicate below when the Guide was provided to the parents.</p> <table border="1"> <tr> <td><input type="checkbox"/> Prior to Meeting</td> <td><input type="checkbox"/> During Meeting</td> <td><input type="checkbox"/> Other</td> <td>Date Guide Provided to Parents: _____</td> </tr> </table>			<input type="checkbox"/> Prior to Meeting	<input type="checkbox"/> During Meeting	<input type="checkbox"/> Other	Date Guide Provided to Parents: _____
<input type="checkbox"/> Prior to Meeting	<input type="checkbox"/> During Meeting	<input type="checkbox"/> Other	Date Guide Provided to Parents: _____				
<input type="checkbox"/> Y <input type="checkbox"/> N	<p>I understand that by signing this, my child will be participating in the Alternate Assessment for the ____ school year and the participation guidelines will be reviewed on an annual basis.</p>						



<input type="checkbox"/> Y <input type="checkbox"/> N	<p>I understand that prior to my child being considered for placement into Performance Dimension B: Progress, an Admissions and Release Committee must convene to develop a communication plan as part of the student's Individualized Education Plan. Documentation of this decision is required on the IEP.</p> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 45%;"> <u>Parent Signature</u>   <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> </div> <div style="width: 45%;"> <u>ARC Chairperson Signature</u>   <hr style="border: 0; border-top: 1px solid black; margin: 5px 0;"/> </div> </div>
Comments (Optional):	
If the student meets Participation Guidelines for the Kentucky's Alternate Assessment, refer to the chart below to determine appropriate grade placement.	
<b>If by October 1 of the current school year the student is no older than:</b>	<b>The student grade assignment will be:</b>
8-10 years old	3
9-11 years old	4
10-12 years old	5
11-13 years old	6
12-14 years old	7
13-15 years old	8
14-16 years old	9
15-17 years old	10
16-18 years old	11
17-19 years old	12
Alternate assessment students who completed grade 12 assessment	14
Indicate the appropriate grade level the student will be assigned to for this school year: <b>Grade:</b>	
<b>ARC Member Signatures</b>	<b>DATE</b>

<i>ARC Chairperson</i>	
<i>Special Education Teacher</i>	
<i>General Education Teacher</i>	
<i>Parent/Guardian</i>	
<i>Parent/Guardian</i>	
<i>Other</i>	

**Appendix B: Test Blue Print****READING****Grade 3**

<b>KCAS</b>	<b>Alternate K-PREP Content Aligned Standards</b>
(RL 1) Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as a basis for the answers. READING STANDARDS FOR LITERATURE	R-3.1 Answer questions to demonstrate understanding of a text. READING STANDARDS FOR LITERATURE
(RIT 9) Compare and contrast the most important points and key details presented in two texts on the same topic. READING STANDARDS FOR INFORMATIONAL TEXT	R-3.2 Compare and contrast the most important points in two texts on the same topic. READING STANDARDS FOR INFORMATIONAL TEXT
(RIT 2) Determine the main idea of a text; recount the key details and explain how they support the main idea. READING STANDARDS FOR INFORMATIONAL TEXT	R-3.3 Determine the main idea of the text. READING STANDARDS FOR INFORMATIONAL TEXT
(RL4) Determine the meaning of words and phrases as they are used in a text, distinguishing literal from non-literal language. READING STANDARDS OF LITERATURE	R-3.4 Determine the meaning of words and phrases as they are used in a text, distinguishing literal from non-literal. READING STANDARDS OF LITERATURE
(RL3) Describe characters in a story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events. READING STANDARDS OF LITERATURE	R-3.5 Describe how a character's actions contribute to the sequence of events of a story. READING STANDARDS OF LITERATURE
(RIT 7) Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur). READING STANDARDS FOR INFORMATIONAL TEXT	R-3.6 Use information gained from illustrations to demonstrate understanding of the text. READING STANDARDS FOR INFORMATIONAL TEXT

#### Grade 4

KCAS	Alternate K-PREP Content Aligned Standards
<p>(RL.4) Determine the meaning of words and phrases as they are used in a text, including those that allude to significant characters found in mythology (e.g., Herculean). READING STANDARDS FOR LITERATURE</p>	<p>R-4.1 Determine the meaning of words and phrases as they are used in text, including those that allude to significant characters found in mythology. READING STANDARDS FOR LITERATURE</p>
<p>(RIT.4) Determine the meaning of general academic and domain- specific words or phrases in a text relevant to a grade 4 topic or subject area. READING STANDARDS FOR INFORMATIONAL TEXT</p>	<p>R-4.2 Determine the meaning of specific words or phrases in text relevant to 4th grade content. READING STANDARDS FOR INFORMATIONAL TEXT</p>
<p>(RIT.2) Determine the main idea of a text and explain how it is supported by key details; summarize the text. READING STANDARDS FOR INFORMATIONAL TEXT</p>	<p>R-4.3 Determine the main idea of a text and how it is supported by details. READING STANDARDS FOR INFORMATIONAL TEXT</p>
<p>(RL.3) Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text (e.g., a character's thoughts, words, or actions). READING STANDARDS FOR LITERATURE</p>	<p>R-4.4 Describe a character, setting and event in a story using details from a text. READING STANDARDS FOR LITERATURE</p>
<p>(RL.2) Determine a theme of a story, drama, or poem from details in the text; summarize the text. READING STANDARDS FOR LITERATURE</p>	<p>R-4.5 Determine a theme of a story from details in the text. READING STANDARDS FOR LITERATURE</p>
<p>(RIT.7) Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears. READING STANDARDS FOR INFORMATIONAL</p>	<p>R-4.6 Interpret and explain how visually, orally, and quantitatively presented information contributes to understanding of the text.</p>

**Grade 5**

<b>KCAS</b>	<b>Alternate K-PREP Content Aligned Standards</b>
(RIT.4) Determine the meaning of general academic and domain- specific words and phrases in a text relevant to a grade 5 topic or subject area. READING STANDARDS FOR INFORMATIONAL TEXT	R-5.1 Determine the meaning of specific words or phrases in text relevant to 5th grade content. READING STANDARDS FOR INFORMATIONAL TEXT
(RL.4) Determine the meaning of words and phrases as they are used in a text, including figurative language such as metaphors and similes. READING STANDARDS FOR LITERATURE	R-5.2 Determine the meaning of figurative language as it is used in text. READING STANDARDS FOR LITERATURE
(RL.2) Determine a theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text. READING STANDARDS FOR LITERATURE	R-5.3 Determine a theme of a story from details in a text including how characters in a story respond to challenges. READING STANDARDS FOR LITERATURE
(RIT.2) Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text. READING STANDARDS FOR INFORMATIONAL TEXT	R-5.4 Determine two main ideas of a text and how they are supported by key details. READING STANDARDS FOR INFORMATIONAL TEXT
(RL.3) Compare and contrast two or more characters, settings, or events in a story or drama, drawing on specific details in the text (e.g., how characters interact). READING STANDARDS FOR LITERATURE	R-5.5 Compare and contrast two characters, settings and events in a story. READING STANDARDS FOR LITERATURE
(RIT.3) Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text. READING STANDARDS FOR INFORMATIONAL TEXT	R-5.6 Determine the relationships between two events or ideas in an historical, scientific or technical text. READING STANDARDS FOR INFORMATIONAL TEXT

**Grade 6**

<b>KCAS</b>	<b>Alternate K-PREP Content Aligned Standards</b>
( RIT.4) Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings. READING STANDARDS FOR INFORMATIONAL TEXT	R-6.1 Determine the meaning of figurative and connotative works and phrases as they are used in text. READING STANDARDS FOR INFORMATIONAL TEXT
( RL.2) Determine a theme or central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments. READING STANDARDS FOR LITERATURE	R-6.2 Determine a theme of a text and how it is conveyed through details; provide a summary. READING STANDARDS FOR LITERATURE
(RL.4) Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of a specific word choice on meaning and tone. READING STANDARDS FOR LITERATURE	R-6.3 Determine the meaning and impact of figurative and connotative words and phrases as they are used in a text. READING STANDARDS FOR LITERATURE
(RIT.2) Determine a central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments. READING STANDARDS FOR INFORMATIONAL TEXT	R-6.4 Determine a central idea of a text, how it is conveyed through details, and provide a summary. READING STANDARDS FOR INFORMATIONAL TEXT
(RIT.6) Determine an author’s point of view or purpose in a text and explain how it is conveyed in the text. READING STANDARDS FOR INFORMATIONAL TEXT	R-6.5 Determine an author’s purpose and explain how it is conveyed in a text. READING STANDARDS FOR INFORMATIONAL TEXT
(RL.7) Compare and contrast the experience of reading a story, drama, or poem to listening to or viewing an audio, video, or live version of the text, including contrasting what they “see” and “hear” when reading the text to what they perceive when they listen or watch. READING STANDARDS FOR LITERATURE	R-6.6 Compare and contrast reading a story to viewing a live version of the text. READING STANDARDS FOR LITERATURE

## Grade 7

KCAS	Alternate K-PREP Content Aligned Standards
<p>(RL.4) Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of rhymes and other repetitions of sounds (e.g., alliteration) on a specific verse or stanza of a poem or section of a story or drama. READING STANDARDS FOR LITERATURE</p>	<p>R-7.1 Determine the meaning of words and phrases as they are used in a poem or story; determine the impact of rhymes and other repetitions of sound on a specific verse or stanza from a poem or section of a story. READING STANDARDS FOR LITERATURE</p>
<p>(RL.2) Determine a theme or central idea of a text and analyze its development over the course of the text; provide an objective summary of the text. READING STANDARDS FOR LITERATURE</p>	<p>R-7.2 Determine a central idea of a text and analyze its development over the course of a text; provide a summary. READING STANDARDS FOR LITERATURE</p>
<p>(RIT.4) Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of a specific word choice on meaning and tone. READING STANDARDS FOR INFORMATIONAL TEXT</p>	<p>R-7.3 Determine meaning and impact of figurative, connotative and technical words and phrases as they are used in text. READING STANDARDS FOR INFORMATIONAL TEXT</p>
<p>( RL.3) Analyze how particular elements of a story or drama interact (e.g., how setting shapes the characters or plot). READING STANDARDS FOR LITERATURE</p>	<p>R-7.4 Explain how character, plot and setting interact within the story. READING STANDARDS FOR LITERATURE</p>
<p>(RIT.3) Analyze the interactions between individuals, events, and ideas in a text (e.g., how ideas influence individuals or events, or how individuals influence ideas or events). READING STANDARDS FOR INFORMATIONAL TEXT</p>	<p>R-7.5 Explain the interactions between individuals and events in a text. READING STANDARDS FOR INFORMATIONAL TEXT</p>
<p>(RL.7) Compare and contrast a written story, drama, or poem to its audio, filmed, staged, or multimedia version, analyzing the effects of techniques unique to each medium (e.g., lighting, sound, color, or camera focus and angles in a film). READING STANDARDS FOR LITERATURE</p>	<p>R-7.6 Compare a written story, to its audio, filmed, staged, or multimedia version, explaining the effects of techniques unique to each medium. READING STANDARDS FOR LITERATURE</p>

## Grade 8

<b>KCAS</b>	<b>Alternate K-PREP Content Aligned Standards</b>
(RL.4) Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts. READING STANDARDS FOR LITERATURE	R-8.1 Determine the meaning of tone and impact of figurative and connotative words and phrases as they are used in text; analyze the tone and impact of analogies in text. READING STANDARDS FOR LITERATURE
(RL.2) Determine a theme or central idea of a text and analyze its development over the course of the text, including its relationship to the characters, setting, and plot; provide an objective summary of the text. READING STANDARDS FOR LITERATURE	R-8.2 Determine a central idea of text and analyze its relationship to the character, setting, and plot. READING STANDARDS FOR LITERATURE
(RIT.4) Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts. READING STANDARDS FOR INFORMATIONAL TEXT	R-8.3 Determine the meaning of tone and impact of figurative, connotative and technical words and phrases as they are used in text; analyze the tone and impact of allusions to other texts. READING STANDARDS FOR INFORMATIONAL TEXT
(RIT.2) Determine a central idea of a text and analyze its development over the course of the text, including its relationship to supporting ideas; provide an objective summary of the text. READING STANDARDS FOR INFORMATIONAL TEXT	R-8.4 Determine a central idea of text and analyze its relationship to supporting ideas. READING STANDARDS FOR INFORMATIONAL TEXT
(RIT.6) Determine an author's point of view or purpose in a text and analyze how the author acknowledges and responds to conflicting evidence or viewpoints. READING STANDARDS FOR INFORMATIONAL TEXT	R-8.5 Determine an author's purpose and interpret how the author responds to conflicting viewpoints in the text. READING STANDARDS FOR INFORMATIONAL TEXT
(RL.5)	R-8.6 Compare and contrast the structure of



Compare and contrast the structure of two or more texts and analyze how the differing structure of each text contributes to its meaning and style. READING STANDARDS FOR LITERATURE	two texts and identify how it contributes to meaning and style. READING STANDARDS FOR LITERATURE
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## Grade 9

KCAS	Alternate K-PREP Content Aligned Standards
<p>(RL.4) Determine the meaning of words and phrases as they are used in the text, including figurative and connotative meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language evokes a sense of time and place; how it sets a formal or informal tone). READING STANDARDS FOR LITERATURE</p>	<p>R-HS.1 Determine the meaning, tone and cumulative impact of figurative and connotative words and phrases as they are used in text. READING STANDARDS FOR LITERATURE</p>
<p>(RL.3) Analyze how complex characters (e.g., those with multiple or conflicting motivations) develop over the course of a text, interact with other characters, and advance the plot or develop the theme. READING STANDARDS FOR LITERATURE</p>	<p>R-HS.2 Analyze how characters develop over the course of a text, interact with other characters, and advance the plot. READING STANDARDS FOR LITERATURE</p>
<p>(RL.2) Determine a theme or central idea of a text and analyze in detail its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text. READING STANDARDS FOR LITERATURE</p>	<p>R-HS.3 Determine a theme of a text and analyze its development over the course of the text including how it is refined by details; provide an objective summary. READING STANDARDS FOR LITERATURE</p>
<p>(RIT.2) Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text. READING STANDARDS FOR INFORMATIONAL TEXT</p>	<p>R-HS.4 Determine a central idea of text and analyze its development over the course of the text, including how it is refined by details; provide an objective summary. READING STANDARDS FOR INFORMATIONAL TEXT</p>
<p>(RIT.1) Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inference drawn from the text. READING STANDARDS FOR INFORMATIONAL TEXT</p>	<p>R-HS.5 Cite details from the text that support inference. READING STANDARDS FOR INFORMATIONAL TEXT</p>
<p>(RIT.6) Determine an author's point of view or purpose in a text and analyze how an author uses rhetoric to advance that point of view or purpose. READING STANDARDS FOR</p>	<p>R-HS.6 Determine an author's purpose in a text and analyze how an author uses rhetoric to advance the purpose. READING STANDARDS FOR INFORMATIONAL TEXT</p>

INFORMATIONAL TEXT	
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## MATH

### Grade 3

KCAS	Alternate K-PREP Content Aligned Standards
(3.OA.1) Interpret products of whole numbers, e.g., interpret $5 \times 7$ as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as $5 \times 7$ .	M-3.1 Interpret products of whole numbers.
(3.NBT.1) Use place value understanding to round whole numbers to the nearest 10 or 100	M-3.2 Demonstrate understanding of place value by rounding two digit whole numbers to the nearest 10.
(3.MD.1) Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.	M-3.3 Tell time to the nearest minute and measure time intervals by solving word problems.
(3.MD.4) Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units—whole numbers, halves, or quarters.	M-3.4 Generate measurement data by measuring a variety of lengths to the inch or half-inch using standard units of measurement and show the data on a line plot.
(3.G.1) Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.	M-3.5 Understand that shapes in different categories may share attributes. Recognize rhombuses, rectangles and squares as examples of quadrilaterals.
(3.G.2) Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. For example, partition a shape into 4 parts with equal area, and describe the area of each part as $\frac{1}{4}$ of the area of the shape.	M-3.6 Partition shapes into equal parts and express each part as a unit fraction of the whole.

**Grade 4**

<b>KCAS</b>	<b>Alternate K-PREP Content Aligned Standards</b>
(4.OA.2) Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.	M-4.1 Multiply and divide to solve word problems.
(4.OA.5) Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. For example, given the rule “Add 3” and the starting number 1 generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.	M-4.2 Generate a number pattern that follows a given rule. Identify apparent features of the pattern.
(4.MD.1) Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two column table. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...	M-4.3 Within the following systems of measurement, express measurement of time and length as larger and smaller units and record measurement equivalents in a two column table.
(4.MD.3) Apply the area and perimeter formulas for rectangles in real world and mathematical problems. For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.	M-4.4 Apply the area and perimeter formulas for rectangles in real world and mathematical problems.
(4.G.1) Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two dimensional figures.	M-4.5 Identify points, lines, perpendicular lines, parallel lines and right, acute and obtuse angles in two dimensional figures.

<p>(4.G.2)</p> <p>Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles</p>	<p>M-4.6 Classify two-dimensional figures based on perpendicular lines, parallel lines and angle measure.</p>
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**Grade 5**

<b>KCAS</b>	<b>Alternate K-PREP Content Aligned Standards</b>
(5.NBT.4) Use place value understanding to round decimals to any place.	M-5.1 Use place value understanding to round decimals to any place.
(5.NF.6) Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.	M-5.2 Solve real world problems involving multiplication of fractions.
(5.OA.3) Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. For example, given the rule “Add 3” and the starting number 0, and given the rule “Add 6” and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.	M-5.3 Generate two real world numerical patterns using two given rules. Form ordered pairs and graph the pairs on a coordinate plane.
(5.G.2) Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.	M-5.4 Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane.
(5.MD.4) Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.	M-5.5 Measure volume by counting unit cubes, using cubic in., cubic ft., and improvised units.
(5.G.3) Understand that attributes belonging to a category of two dimensional figures also belong to all subcategories of that category. For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.	M-5.6 Understand that attributes belonging to a category of two dimensional figures also belong to all subcategories of that category.

**Grade 6**

<b>KCAS</b>	<b>Alternate K-PREP Content Aligned Standards</b>
(6.NS.3) Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.	M-6.1 Fluently add and subtract multi-digit decimals using the standard algorithm.
(6.NS.5) Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.	M-6.2 Use positive and negative numbers to represent quantities in real world contexts.
(6.EE.1) Write and evaluate numerical expressions involving whole- number exponents.	M-6.3 Evaluate numerical expressions involving whole number exponents.
(6.EE.4) Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them). For example, the expressions $y + y + y$ and $3y$ are equivalent because they name the same number regardless of which number $y$ stands for.	M-6.4 Identify when two expressions are equivalent.
(6.G.1) Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems.	M-6.5 Find the area of polygons by composing into rectangles or decomposing into other shapes in the context of solving real-world problems.
(6.SP.4) Display numerical data in plots on a number line, including dot plots, histograms, and box plots.	M-6.6 Display numerical data in plots on a number line and histograms.



**Grade 7**

<b>KCAS</b>	<b>Alternate K-PREP Content Aligned Standards</b>
(7.RPR.3) Use proportional relationships to solve multistep ratio and percent problems. Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.	M-7.1 Use proportional relationships to solve multistep ratio and percent problems.
(7.EE.3) Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. For example: If a woman making \$25 an hour gets a 10% raise, she will make an additional $\frac{1}{10}$ of her salary an hour, or \$2.50, for a new salary of \$27.50.	M-7.2 Solve real-life and mathematical problems posed with positive and negative rational numbers, (whole numbers, fractions and decimals) converting between forms as appropriate.
(7.NS.1d) Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. d. Apply properties of operations as strategies to add and subtract rational numbers.	M-7.3 Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers on a horizontal or vertical number line diagram.
(7.NS.3) Solve real-world and mathematical problems involving the four operations with rational numbers.	M-7.4 Solve real-world and mathematical problems involving the four operations with rational numbers.
(7.G.1) Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.	M-7.5 Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas, (triangles and quadrilaterals) from a scale drawing.

<p>(7.G.6)</p> <p>Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.</p>	<p>M-7.6 Solve real-world or mathematical problems involving volume and surface area of three dimensional objects composed of cubes and right prisms.</p>
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**Grade 8**

<b>KCAS</b>	<b>Alternate K-PREP Content Aligned Standards</b>
(8.EE.5) Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed.	M-8.1 Compare the slope of the graph in two different proportional relationships.
(8.EE.7a) Solve linear equations in one variable. a. Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form $x = a$ , $a = a$ , or $a = b$ results (where $a$ and $b$ are different numbers).	M-8.2 Solve one variable linear equations.
(8.G.2) Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.	M-8.3 Demonstrate an understanding of congruency between two-dimensional figures.
(8.G.4) Understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations; given two similar two dimensional figures, describe a sequence that exhibits the similarity between them.	M-8.4 Demonstrate understanding of similarity between two-dimensional figures.
(8.F.1) Understand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output.	M-8.5 Demonstrate an understanding that a function is a rule that assigns to each input exactly one output.

<p>(8.G.9) Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems.</p>	<p>M-8.6 Given a volume formula, solve real-world problems involving cones, cylinders and spheres.</p>
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**Grade 10**

<b>KCAS</b>	<b>Alternate K-PREP Content Aligned Standards</b>
(NQ1) Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.	M-HS.1 Choose and interpret the scale and the origin in graphs and data displays.
(SID 1) Represent data with plots on the real number line (dot plots, histograms, and box plots).	M-HS.2 Represent data on the real number line using histograms and dot plots.
(SID 2) Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets.	M-HS.3 Use statistics appropriate to the shape of the data distribution to compare center (median, mean) of two or more different data sets.
(ACED 2) Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.	M-HS.4 When given equations using two or more variables, graph their relationship on a coordinate axes.
(AREI 3) Solve linear equations and inequalities in one variable, including equations with coefficients represented by letters.	M-HS.5 Solve linear equations and inequalities in one variable.
(GMG 1) Use geometric shapes, their measures, and their properties to describe objects (e.g., modeling a tree trunk or a human torso as a cylinder).	M-HS.6 Use geometric shapes and their properties to describe objects.

## WRITING

### Grade 4

KCAS	Alternate K-PREP Content Aligned Standards
<p>(Wri.3) Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally. b. Use dialogue and description to develop experiences and events or show the responses of characters to situations. c. Use a variety of transitional words and phrases to manage the sequence of events. d. Use concrete words and phrases and sensory details to convey experiences and events precisely. e. Provide a conclusion that follows from the narrated experiences or events.</p>	<p>W-4.1 Communicate real experiences by orienting the reader, introducing characters, organizing a sequence of events, using descriptions with concrete words to convey experiences, and provide a conclusion.</p>
<p>(Wri.4) Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience.</p>	<p>W-4.2 Produce clear and organized writing.</p>
<p>(Wri.5) With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing.</p>	<p>W-4.3 With guidance and support from peers and adults, develop and strengthen writing as needed by planning, and revising.</p>
<p>(Wri.6) With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of one page in a single sitting.</p>	<p>W-4.4 With some guidance and support from adults, use technology, including the Internet, to produce writing as well as to interact and collaborate with others.</p>
<p>(Wri.7) Conduct short research projects that build knowledge through investigation of different aspects of a topic.</p>	<p>W-4.5 Conduct short research projects that build knowledge through investigation of different aspects of a topic.</p>
<p>(Wri.8) Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize</p>	<p>W-4.6 Recall relevant information from experiences or gather relevant information from print and digital sources and categorize information.</p>

information, and provide a list of sources.	
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## Grade 5

KCAS	Alternate K-PREP Content Aligned Standards
<p>(Wri.3) Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally. b. Use narrative techniques, such as dialogue, description, and pacing, to develop experiences and events or show the responses of characters to situations. c. Use a variety of transitional words, phrases, and clauses to manage the sequence of events. d. Use concrete words and phrases and sensory details to convey experiences and events precisely. e. Provide a conclusion that follows from the narrated experiences or events.</p>	<p>W-5.1 Communicate real experiences by orienting the reader, introducing characters, organizing a sequence of events naturally, using dialogue with concrete words and phrases to convey experiences, and provide a conclusion.</p>
<p>(Wri.4) Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience.</p>	<p>W-5.2 Produce clear and organized writing in which the development is appropriate to task.</p>
<p>(Wri.5) With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.</p>	<p>W-5.3 With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and rewriting.</p>
<p>(Wri.8) Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources.</p>	<p>W-5.4 Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes.</p>
<p>(Wri.6) With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of two pages in a single sitting.</p>	<p>W-5.5 With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others.</p>
<p>(Wri.7)</p>	<p>W-5.6 Conduct short research projects that use</p>



Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic.	several sources to build knowledge through investigation of different aspects of a topic.
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**Grade 6**

<b>KCAS</b>	<b>Alternate K-PREP Content Aligned Standards</b>
(Wri.3 ) Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well structured event sequences. a. Engage and orient the reader by establishing a context and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically. b. Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters. c. Use a variety of transition words, phrases, and clauses to convey sequence and signal shifts from one time frame or setting to another. d. Use precise words and phrases, relevant descriptive details, and sensory language to convey experiences and events. e. Provide a conclusion that follows from the narrated experiences or events.	W-6.1 Communicate real experiences by engaging and orienting the reader, introducing characters, organizing a sequence of events that unfolds naturally using dialogue, description, and pacing with precise words and phrases, using descriptive details, sensory language and basic transition words to convey experiences and manage time or setting change, and provide a reasonable conclusion.
(Wri.4) Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	W-6.2 Produce clear and coherent writing in which the development and organization are appropriate to task.
(Wri.5) With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.	W-6.3 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, and rewriting.
(Wri.8) Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources.	W-6.4 Gather relevant information from multiple print and digital sources; assess the credibility of each source and quote or paraphrase the data avoiding plagiarism.
(Wri.6) Use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of three	W-6.5 Use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others.

pages in a single sitting.	
(Wri.7) Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.	W-6.6 Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.

**Grade 8**

<b>KCAS</b>	<b>Alternate K-PREP Content Aligned Standards</b>
<p>(Wri.3) Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well structured event sequences. a. Engage and orient the reader by establishing a context and point of view and introducing a narrator and/or characters; organize an event sequence that unfolds naturally and logically. b. Use narrative techniques, such as dialogue, pacing, description, and reflection, to develop experiences, events, and/or characters. c. Use a variety of transition words, phrases, and clauses to convey sequence, signal shifts from one time frame or setting to another, and show the relationships among experiences and events. d. Use precise words and phrases, relevant descriptive details, and sensory language to capture the action and convey experiences and events. e. Provide a conclusion that follows from and reflects on the narrated experiences or events.</p>	<p>W-8.1 Communicate real experiences by engaging and orienting the reader by establishing a singular point of view, introducing characters, organizing a sequence of events that unfolds naturally using dialogue, description, and pacing with precise words and phrases, using descriptive details, sensory language basic transition words and phrases to convey experiences and manage time and setting changes and show relationships between experiences, and provide a reasonable conclusions and reflect on the experiences.</p>
<p>(Wri.2) Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content. a. Introduce a topic clearly, previewing what is to follow; organize ideas, concepts, and information into broader categories; include formatting (e.g., headings), graphics (e.g., charts, tables), and multimedia when useful to aiding comprehension. b. Develop the topic with relevant, well-chosen facts, definitions, concrete details, quotations, or other information and examples. c. Use appropriate and varied transitions to create cohesion and clarify the relationships among ideas and concepts. d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Establish and</p>	<p>W-8.2 Write informative/explanatory texts to examine a topic and analyze relevant content.</p>

maintain a formal style. f. Provide a concluding statement or section that follows from and supports the information or explanation presented.	
(Wri.4) Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	W-8.3 Produce clear and coherent writing in which the development, organization, and style are appropriate to task.
(Wri.5) With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on how well purpose and audience have been addressed.	W-8.4 With some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, and rewriting, focusing on how well purpose and audience have been addressed.
(Wri.6) Use technology, including the Internet, to produce and publish writing and present the relationships between information and ideas efficiently as well as to interact and collaborate with others.	W-8.5 Use technology, including the Internet, to produce and publish writing and present the information and ideas efficiently as well as to interact with others.
(Wri.7) Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	W-8.6 Conduct short research projects to answer a question drawing on several sources and generating additional related, focused questions.

**Grade 10**

<b>KCAS</b>	<b>Alternate K-PREP Content Aligned Standards</b>
(Wri.3) Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences. a. Engage and orient the reader by setting out a problem, situation, or observation, establishing one or multiple point(s) of view, and introducing a narrator and/or characters; create a smooth progression of experiences or events. b. Use narrative techniques, such as dialogue, pacing, description, reflection, and multiple plot lines, to develop experiences, events, and/or characters. c. Use a variety of techniques to sequence events so that they build on one another to create a coherent whole. d. Use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters. e. Provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative.	W-HS-10.1 Communicate real experiences by engaging and orienting the reader by establishing a singular point of view, introducing characters, organizing a sequence of events that unfolds naturally and logically using dialogue, description and pacing with precise words and phrases, using descriptive details, sensory language, a variety of transition words and phrases to create a coherent whole and capture the action, and provide a reasonable conclusion and reflect on the experience.
(Wri.4) Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.	W-HS-10.2 Produce clear and coherent writing in which the development, organization, and style are appropriate to task and purpose.
(Wri.5) Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.	W-HS-10.3 Develop writing as needed by planning, revising, editing, rewriting, and focusing on what is significant for a specific purpose and audience.
(Wri.6) Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.	W-HS-10.4 Use technology, including the Internet, to produce, publish, and update writing products and to display information.
(Wri.8) Gather relevant information from multiple authoritative print and digital sources, using	W-HS-10.5 Gather relevant information from multiple print and digital sources; assess the usefulness and credibility of each source in

advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.	answering the research question; integrate information selectively to maintain flow of ideas.
(Wri.7) Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.	W-HS-10.6 Conduct short research projects or solve a problem, demonstrating understanding of the subject under investigation.

**Grade 11**

<b>KCAS</b>	<b>Alternate K-PREP Content Aligned Standards</b>
<p>(Wri.3) Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details, and well-structured event sequences. a. Engage and orient the reader by setting out a problem, situation, or observation and its significance, establishing one or multiple point(s) of view, and introducing a narrator and/or characters; create a smooth progression of experiences or events. b. Use narrative techniques, such as dialogue, pacing, description, reflection, and multiple plot lines, to develop experiences, events, and/or characters. c. Use a variety of techniques to sequence events so that they build on one another to create a coherent whole and build toward a particular tone and outcome (e.g., a sense of mystery, suspense, growth, or resolution). d. Use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, setting, and/or characters. e. Provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative.</p>	<p>W-HS-11.1 Create or communicate real experiences by engaging and orienting the reader by establishing a singular point of view, introducing characters, organizing a sequence of events that unfolds naturally and logically, using dialogue, description and pacing to develop experiences and characters, using a variety of transition words and phrases to create a coherent whole, using precise words and phrases, descriptive details, and sensory language to capture the action and experiences and develop settings and characters, and provide a reasonable conclusion and reflect on the experiences.</p>
<p>(Wri.4) Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</p>	<p>W-HS-11.2 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.</p>
<p>(Wri.5) Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.</p>	<p>W-HS-11.3 Develop and strengthen writing as needed by planning, revising, editing, rewriting, and focusing on what is most significant for a specific purpose and audience.</p>
<p>(Wri.6) Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback, including new arguments</p>	<p>W-HS-11.4 Use technology including the internet to produce, publish and update shared writing products including new arguments and information.</p>



or information.	
<p>(Wri.8)  Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the strengths and limitations of each source in terms of the task, purpose, and audience; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and over reliance on any one source and following a standard format for citation.</p>	<p>W-HS-11.5 Gather relevant information from multiple print and digital sources: use advanced searches effectively; assess the usefulness and credibility of each source in terms of the task, purpose, and audience; integrate information selectivity to maintain flow of ideas, avoiding plagiarism.</p>
<p>(Wri.7)  Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources</p>	<p>W-HS-11.6 Conduct short as well as more sustained research projects to answer a question or solve a problem; broaden the inquiry when appropriate; demonstrating understanding of the subject under investigation.</p>

## SCIENCE (KCAS STANDARDS)

### Grade 4

SCI 4.1 Students will infer causes and effects of pushes and pulls (forces) on objects based on representations or interpretations of straight-line movement/motion in charts, graphs and qualitative comparisons. The position and motion of objects can be changed by pushing or pulling. The amount of change is related to the force (defined as the strength of the push or pull) and the mass of the object(s) used. The force with which a ball is hit illustrates this principle. Cause and effect relationships, along with predicted consequences related to the strength of pushes and pulls (force) on an object's position and motion should be explored and qualitatively compared.

SCI 4.2 Students will compare a variety of life cycles of plants and animals in order to classify and make inferences about an organism. Plants and animals have life cycles that include the beginning of life, growth and development, reproduction and death. The details of a life cycle are different for different organisms. Models of organisms' life cycles should be used to classify and make inferences about an organism.

SCI 4.3 Students will analyze patterns and make generalizations about the basic relationships of plants and animals in an ecosystem (food chain). Plants make their own food. All animals depend on plants. Some animals eat plants for food. Other animals eat animals that eat the plants. Basic relationships and connections between organisms in food chains, including the flow of energy, can be used to discover patterns within ecosystems.

SCI 4.4 Students will: compare the different structures and functions of plants and animals that contribute to the growth, survival and reproduction of the organisms; make inferences about the relationship between structure and function in organisms. Each plant or animal has structures that serve different functions in growth, survival and reproduction. For example, humans have distinct body structures for walking, holding, seeing and talking. Evidence about the relationship between structure and function should be used to make inferences and draw conclusions.

SCI 4.5 Students will: describe human interactions in the environment where they live; classify the interactions as beneficial or harmful to the environment using data/evidence to support conclusions. All organisms, including humans, cause changes in the environment where they live. Some of these changes are detrimental to the organism or to other organisms; other changes are beneficial (e.g., dams benefit some aquatic organisms but are detrimental to others). By evaluating the consequences of change using cause and effect relationships, solutions to real life situations/dilemmas can be proposed.

## Grade 7

SCI 7.1 Students will: classify elements and compounds according to their properties; compare properties of different combinations of elements. Observations of simple experiments illustrate that the atoms of chemical elements do not break down during normal laboratory reactions such as heating, exposure to electric currents, or reaction with acids. Elements combine in many ways to produce compounds. Common patterns emerge when comparing and contrasting the properties of compounds to the elements from which they are made. Understanding of these patterns allows for evidence- based predictions of new or different combinations of elements/compounds.

SCI 7.2 Students will explain the cause and effect relationship between simple observable motion and unbalanced forces. An object remains at rest or maintains a constant speed and direction of motion unless an unbalanced force acts on it (e.g., gravity). When an unbalanced force acts on an object, the change in speed or direction depends on the size and direction of the force.

SCI 7.3 Students will make inferences and predictions related to changes in the Earth's surface or atmosphere based on data/evidence. The Earth's processes we see today, including erosion, movement of lithospheric plates and changes in atmospheric composition, are predictable and similar to those that occurred in the past. Analysis of evidence from Earth's history substantiates the conclusion that the planet has also been influenced by occasional catastrophes such as the impact of an asteroid or comet.

SCI 7.4 Students will: describe the role of genes/chromosomes in the passing of information from one generation to another (heredity); compare inherited and learned traits. Every organism requires a set of instructions for specifying its traits. This information is contained in genes located in the chromosomes of each cell that can be illustrated through the use of models. Heredity is the passage of these instructions from one generation to another and should be distinguished from learned traits.

SCI 7.5 Students will compare abiotic and biotic factors in an ecosystem in order to explain consequences of change in one or more factors. The number of organisms an ecosystem can support depends on the resources available and abiotic factors (e.g., quantity of light and water, range of temperatures, soil composition). Given adequate biotic and abiotic resources and no diseases or predators, populations (including humans) increase at rapid rates. Lack of resources and other factors, such as predation and climate, limit the growth of populations in specific niches in the ecosystem.

## Grade 11

SCI 11.1 Students will classify or make generalizations about elements from data of observed patterns in atomic structure and/or position on the periodic table. The periodic table is a consequence of the repeating pattern of outermost electrons.
SCI 11.2 Students will: select or construct accurate and appropriate representations for motion (visual, graphical and mathematical); defend conclusions/explanations about the motion of objects and real-life phenomena from evidence/data. Objects change their motion only when a net force is applied. Newton's Laws of motion are used to describe the effects of forces on the motion of objects. Conservation of mechanical energy and conservation of momentum may also be used to predict motion.
SCI 11.3 Students will: explain phenomena (falling objects, planetary motion, satellite motion) related to gravity; describe the factors that affect gravitational force. Gravity is a universal force that each mass exerts on every other mass.
SCI 11.4 Students will: explain the relationship between sexual reproduction (meiosis) and the transmission of genetic information; draw conclusions/make predictions based on hereditary evidence/data (pedigrees, punnet squares). Multicellular organisms, including humans, form from cells that contain two copies of each chromosome. This explains many features of heredity. Transmission of genetic information through sexual reproduction to offspring occurs when male and female gametes, that contain only one representative from each chromosome pair, unite.
SCI 11.5 Students will: predict the consequences of changes in resources to a population; select or defend solutions to real-world problems of population control. Living organisms have the capacity to produce populations of infinite size. However, behaviors, environments and resources influence the size of populations. Models (e.g., mathematical, physical, conceptual) can be used to make predictions about changes in the size or rate of growth of a population.

## **SOCIAL STUDIES (KCAS STANDARDS)**

### **Grade 5**

SS 5.1 Students will identify and compare the cultures of diverse groups and explain why people explored and settled in Kentucky.
SS 5.2 Students will give examples of conflicts between individuals or groups today and describe appropriate conflict resolution strategies (e.g., compromise, cooperation, communication) to use.
SS 5.3 Students will identify the three branches of Kentucky government, explain the basic duties of each branch (executive-enforce the laws, legislative-make the laws, judicial- interpret the laws) and identify important state offices/ leaders, (Governor, Lieutenant Governor, General Assembly, Senate, House, representatives, senators, Kentucky Supreme Court, judges) associated with each branch.
SS 5.4 Students will use geographic tools (e.g., maps, charts, graphs) to identify and describe natural resources and other physical characteristics (e.g., major landforms, major bodies of water, weather, climate, roads, bridges) in regions of Kentucky and the United States.

### **Grade 8**

SS 8.1 Students will explain how history is a series of connected events shaped by multiple cause-and-effect relationships and give examples of those relationships.
SS 8.2 Students will explain how compromise and cooperation are possible choices to resolve conflict among individuals and groups in the present day.
SS 8.3 Students will explain and give examples of how, in order for the U.S. government to function as a democracy, citizens must assume responsibilities (e.g., participating in community activities, voting in elections) and duties (e.g., obeying the law, paying taxes, serving on a jury, registering for the military).
SS 8.4 Students will use a variety of geographic tools (maps, photographs, charts, graphs, data bases, satellite images) to interpret patterns and locations on Earth's surface in the present day.

### **Grade 12**

SS 12.1 Students will explain how the second half of the 20th century was characterized by rapid social, political and economic changes that created new challenges (e.g., population growth, diminishing natural resources, environmental concerns, human rights issues, technological and scientific advances, shifting political alliances, globalization of the economy) in countries around the world, and give examples of how countries have addressed these challenges.
SS 12.2 Students will explain and give examples of how numerous factors influence the supply and demand of products (e.g., supply—technology, cost of inputs, number of sellers: demand—income, utility, price of similar products, consumers' preferences).
SS 12.3 Students will explain how belief systems, knowledge, technology and behavior patterns define cultures and help to explain historical perspectives and events in the modern world (1500 A.D. to present) and United States (Reconstruction to present).
SS 12.4 Students will analyze how powers of government are distributed and shared among levels and branches and evaluate how this distribution of powers protects the "common good" (e.g., Congress legislates on behalf of the people; the President represents the people as a nation; the Supreme Court acts on behalf of the people as a whole when it interprets the Constitution).

## Appendix C: Performance Level Descriptors

### Grade Three Reading Performance Level Descriptors

Performance Level	DESCRIPTOR
<b>Reading Skills/Concepts</b>	<p>Specified reading skills/concepts which represent a portion of the grade level content expectations:</p> <ol style="list-style-type: none"> <li>1. Use information gained from illustrations to demonstrate understanding of the text (Reading 3.6)</li> <li>2. Answer questions to demonstrate understanding of a text. (Reading 3.1)</li> <li>3. Compare and contrast the most important points in two texts on the same topic. (Reading 3.2)</li> <li>4. Determine the main idea of the text (Reading 3.3)</li> <li>5. Determine the meaning of words and phrases as they are used in a text, distinguishing literal from non-literal (Reading 3.4)</li> <li>6. Describe how a character's actions contribute to the sequence of events of a story. (Reading 3.5)</li> </ol>
<b><i>Distinguished</i></b>	<p>The student exceeds the expectations for demonstrating an independent and accurate understanding of the specified reading skills/concepts. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment with analysis and reflection by:</p> <ul style="list-style-type: none"> <li>– using authentic reading materials (e.g., grade/age appropriate novels, nonfiction text, reference materials, magazines, newspapers, etc.)</li> <li>– applying reading skill/concepts to solve real-world problems that represent a variety of contexts and environments to answer questions and locate information</li> <li>– solving problems that require analyzing or reflecting on the task (e.g., determines meanings of words, identifies main idea and answers questions related to text, compares and contrasts similar ideas across texts, reflects on how changing character action can alter the sequence of a text; categorize words and phrases as literal or non-literal, etc.)</li> </ul>
<b><i>Proficient</i></b>	<p>The student demonstrates an independent and accurate understanding of the specified reading skills/concepts. Occasional inaccuracies, which do not interfere with conceptual understanding, may be present. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment by:</p> <ul style="list-style-type: none"> <li>– using authentic reading materials (e.g., grade/age appropriate novels, nonfiction text, reference materials, magazines, newspapers, etc.)</li> <li>– applying reading skill/concept to solve real-world problems that represent a variety of contexts and environments to answer questions and locate information</li> <li>– using relevant details (e.g., context cues, illustrations, similar ideas across texts, word meaning )</li> <li>– using reading vocabulary (e.g., compare/contrast, literal/non-literal, main idea, character, sequence, etc.)</li> </ul>

<b><i>Apprentice</i></b>	<p>The student demonstrates basic understanding of the specified reading skills/concepts. Inaccuracies may interfere with or limit the conceptual understanding. The student demonstrates some understanding and is able to apply the skills/concepts to a few authentic tasks, materials, and/or environments by:</p> <ul style="list-style-type: none"> <li>– answering the questions (e.g., match word to meaning; identifies how character effects sequence, etc.)</li> <li>– using relevant details (e.g., context cues, illustrations, similar ideas across texts, word meaning, etc. )</li> <li>– using reading vocabulary (e.g., context, period, question mark, plot, character, next, etc.)</li> </ul>
<b><i>Novice</i></b>	<p>The student demonstrates little or no understanding of the reading skills/concepts. Inaccuracies interfere with the conceptual understanding. The student demonstrates this by:</p> <ul style="list-style-type: none"> <li>– inaccurate use of details (e.g., context cues, sentence meaning, character traits, sequence, etc.)</li> <li>– inaccurate or no use of reading vocabulary (e.g., compare/contrast, literal/non-literal, main idea, character, sequence, etc.)</li> </ul>

## Grade Four Reading Performance Level Descriptors

Performance Level	DESCRIPTOR
<b>Reading Skills/Concepts</b>	<p>Specified reading skills/concepts which represent a portion of the grade level content expectations:</p> <ol style="list-style-type: none"> <li>1. Determine the meaning of words and phrases as they are used in text, including those that allude to significant characters found in mythology. (Reading 4.1)</li> <li>2. Determine the meaning of specific words or phrases in text relevant to 4<sup>th</sup> grade content. (Reading 4.2)</li> <li>3. Determine the main idea of a text and how it is supported by details. (Reading 4.3)</li> <li>4. Describe a character, setting and event in a story using details from a text. (Reading 4.4)</li> <li>5. Determine a theme of a story from details in the text. (Reading 4.5)</li> <li>6. Interpret and explain how visually, orally, and quantitatively presented information contributes to understanding of the text. (Reading 4.6)</li> </ol>
<b><i>Distinguished</i></b>	<p>The student exceeds the expectations for demonstrating an independent and accurate understanding of the specified reading skills/concepts. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment with analysis and reflection by:</p> <ul style="list-style-type: none"> <li>– using authentic reading materials (e.g., grade/age appropriate novels, nonfiction text, reference materials, magazines, newspapers, etc.)</li> <li>– applying reading skill/concepts to solve real-world problems that represent a variety of contexts and environments to answer questions and locate information</li> <li>– solving problems that require analyzing or reflecting on the task (e.g., determines meanings of words and phrases related to mythology and other grade level content, uses details from a text to identify and describe a character, setting, event, theme and main idea of a text, uses non-text information to understand the text, etc.)</li> </ul>
<b><i>Proficient</i></b>	<p>The student demonstrates an independent and accurate understanding of the specified reading skills/concepts. Occasional inaccuracies, which do not interfere with conceptual understanding, may be present. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment by:</p> <ul style="list-style-type: none"> <li>– using authentic reading materials (e.g., grade/age appropriate novels, nonfiction text, reference materials, magazines, newspapers, etc.)</li> <li>– applying reading skill/concept to solve real-world problems that represent a variety of contexts and environments to answer questions and locate information</li> <li>– using relevant details (e.g., names, character and plot description, picture caption, sequence, etc.)</li> <li>– using reading vocabulary (e.g., mythology, character, setting, theme, main idea, details, etc.)</li> </ul>



<b><i>Apprentice</i></b>	<p>The student demonstrates basic understanding of the specified reading skills/concepts. Inaccuracies may interfere with or limit the conceptual understanding. The student demonstrates some understanding and is able to apply the skills/concepts to a few authentic tasks, materials, and/or environments by:</p> <ul style="list-style-type: none"> <li>– answering the question (e.g., matches character to story; highlights picture captions; etc.)</li> <li>– using relevant details (e.g., names, character and plot description, picture caption, sequence, etc.)</li> <li>– using reading vocabulary (e.g., mythology, character, setting, theme, main idea, details, etc.)</li> </ul>
<b><i>Novice</i></b>	<p>The student demonstrates little or no understanding of the reading skills/concepts. Inaccuracies interfere with the conceptual understanding. The student demonstrates this by:</p> <ul style="list-style-type: none"> <li>– inaccurate use of details (e.g., names, character and plot description, picture caption, sequence, etc.)</li> <li>– inaccurate or no use of reading vocabulary (e.g., mythology, character, setting, theme, main idea, details, etc.)</li> </ul>

## Grade Five Reading Performance Level Descriptors

Performance Level	DESCRIPTOR
<b>Reading Skills/Concepts</b>	<p>Specified reading skills/concepts which represent a portion of the grade level content expectations:</p> <ol style="list-style-type: none"> <li>1. Determine the meaning of specific words or phrases in text relevant to 5<sup>th</sup> grade content. (Reading 5.1)</li> <li>2. Determine the meaning of figurative language as it is used in text. (Reading 5.2)</li> <li>3. Determine a theme of a story from details in a text including how characters in a story respond to challenges. (Reading 5.3)</li> <li>4. Determine two main ideas of a text and how they are supported by key details. (Reading 5.4)</li> <li>5. Compare and contrast two characters, settings and events in a story. (Reading 5.5)</li> <li>6. Determine the relationships between two events or ideas in an historical, scientific or technical text. (Reading 5.6)</li> </ol>
<b><i>Distinguished</i></b>	<p>The student exceeds the expectations for demonstrating an independent and accurate understanding of the specified reading skills/concepts. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment with analysis and reflection by:</p> <ul style="list-style-type: none"> <li>– using authentic reading materials (e.g., grade/age appropriate novels, nonfiction text, reference materials, magazines, newspapers, etc.)</li> <li>– applying reading skill/concepts to solve real-world problems that represent a variety of contexts and environments to answer questions and locate information</li> <li>– solving problems that require analyzing or reflecting on the task (e.g., describe the relationship between two events or ideas, compares and contrasts two features of a text, determines meaning of words or phrases related to grade level content or figurative speech, explains how key details support the main ideas, etc.)</li> </ul>
<b><i>Proficient</i></b>	<p>The student demonstrates an independent and accurate understanding of the specified reading skills/concepts. Occasional inaccuracies, which do not interfere with conceptual understanding, may be present. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment by:</p> <ul style="list-style-type: none"> <li>– using authentic reading materials (e.g., grade/age appropriate novels, nonfiction text, reference materials, magazines, newspapers, etc.)</li> <li>– applying reading skill/concept to solve real-world problems that represent a variety of contexts and environments to answer questions and locate information</li> <li>– using relevant details (e.g., compare/contrast, characteristics of character, time, setting, etc. )</li> <li>– using reading vocabulary (e.g., figurative language, character, setting, theme, main idea, details, etc.)</li> </ul>

<b><i>Apprentice</i></b>	<p>The student demonstrates basic understanding of the specified reading skills/concepts. Inaccuracies may interfere with or limit the conceptual understanding. The student demonstrates some understanding and is able to apply the skills/concepts to a few authentic tasks, materials, and/or environments by:</p> <ul style="list-style-type: none"> <li>– answering the questions (e.g., “what is the same between these two events” etc.)</li> <li>– using relevant details (e.g., compare/contrast, characteristics of character, time, setting, etc. )</li> <li>– using reading vocabulary (e.g., figurative language, character, setting, theme, main idea, details, etc.)</li> </ul>
<b><i>Novice</i></b>	<p>The student demonstrates little or no understanding of the reading skills/concepts. Inaccuracies interfere with the conceptual understanding. The student demonstrates this by:</p> <ul style="list-style-type: none"> <li>– inaccurate use of details (e.g., compare/contrast, characteristics of character, time, setting, etc. )</li> <li>– inaccurate or no use of reading vocabulary (e.g., figurative language, character, setting, theme, main idea, details, etc.)</li> </ul>

## Grade Six Reading Performance Level Descriptors

Performance Level	DESCRIPTOR
<b>Reading Skills/Concepts</b>	<p>Specified reading skills/concepts which represent a portion of the grade level content expectations:</p> <ol style="list-style-type: none"> <li>1. Determine the meaning of figurative and connotative words and phrases as they are used in text. (Reading 6.1)</li> <li>2. Determine a theme of a text and how it is conveyed through details; provide a summary. (Reading 6.2)</li> <li>3. Determine the meaning and impact of figurative and connotative words and phrases as they are used in a text. (Reading 6.3)</li> <li>4. Determine a central idea of a text, how it is conveyed through details, and provide a summary. (Reading 6.4)</li> <li>5. Determine an author's purpose and explain how it is conveyed in a text. (Reading 6.5)</li> <li>6. Compare and contrast reading a story to viewing a live version of the text. (Reading 6.6)</li> </ol>
<b><i>Distinguished</i></b>	<p>The student exceeds the expectations for demonstrating an independent and accurate understanding of the specified reading skills/concepts. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment with analysis and reflection by:</p> <ul style="list-style-type: none"> <li>– using authentic reading materials (e.g., grade/age appropriate novels, nonfiction text, reference materials, magazines, newspapers, etc.)</li> <li>– applying reading skill/concepts to solve real-world problems that represent a variety of contexts and environments to answer questions and locate information</li> <li>– solving problems that require analyzing or reflecting on the task (e.g., identify meaning and impact of unknown words, identify and analyze the author's purpose, categorize details that support the central idea, summarize theme or idea of a text, etc.)</li> </ul>
<b><i>Proficient</i></b>	<p>The student demonstrates an independent and accurate understanding of the specified reading skills/concepts. Occasional inaccuracies, which do not interfere with conceptual understanding, may be present. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment by:</p> <ul style="list-style-type: none"> <li>– using authentic reading materials (e.g., grade/age appropriate novels, nonfiction text, reference materials, magazines, newspapers, etc.)</li> <li>– applying reading skill/concept to solve real-world problems that represent a variety of contexts and environments to answer questions and locate information</li> <li>– using relevant details (e.g., how words change context of a text, summarize details and ideas, etc.)</li> <li>– using reading vocabulary (e.g., summary, connotative and figurative language, compare/contrast, purpose, central idea, details, etc.)</li> </ul>

<b><i>Apprentice</i></b>	<p>The student demonstrates basic understanding of the specified reading skills/concepts. Inaccuracies may interfere with or limit the conceptual understanding. The student demonstrates some understanding and is able to apply the skills/concepts to a few authentic tasks, materials, and/or environments by:</p> <ul style="list-style-type: none"> <li>– answering the questions (e.g., match words that have the same meaning, identify the theme or purpose, etc.)</li> <li>– using relevant details (e.g., how words change context of a text, summarize details and ideas, etc.)</li> <li>– using reading vocabulary (e.g., summary, connotative and figurative language, compare/contrast, purpose, central idea, details, etc.)</li> </ul>
<b><i>Novice</i></b>	<p>The student demonstrates little or no understanding of the reading skills/concepts. Inaccuracies interfere with the conceptual understanding. The student demonstrates this by:</p> <ul style="list-style-type: none"> <li>– inaccurate use of details (e.g., how words change context of a text, summarize details and ideas, etc.)</li> <li>– inaccurate or no use of reading vocabulary (e.g., summary, connotative and figurative language, compare/contrast, purpose, central idea, details, etc.)</li> </ul>

## Grade Seven Reading Performance Level Descriptors

Performance Level	DESCRIPTOR
<b>Reading Skills/Concepts</b>	<p>Specified reading skills/concepts which represent a portion of the grade level content expectations:</p> <ol style="list-style-type: none"> <li>1. Determine the meaning of words and phrases as they are used in a poem or story; determine the impact of rhymes and other repetitions of sound on a specific verse or stanza from a poem or section of a story. (Reading 7.1)</li> <li>2. Determine a central idea of a text and analyze its development over the course of a text; provide a summary. (Reading 7.2)</li> <li>3. Determine the meaning and impact of figurative, connotative and technical words and phrases as they are used in text. (Reading 7.3)</li> <li>4. Explain how character, plot and setting interact within the story. (Reading 7.4)</li> <li>5. Explain the interactions between individuals and events in a text. (Reading 7.5)</li> <li>6. Compare a written story, to its audio, filmed, staged, or multimedia version, explaining the effects of techniques unique to each medium. (Reading 7.6)</li> </ol>
<b><i>Distinguished</i></b>	<p>The student exceeds the expectations for demonstrating an independent and accurate understanding of the specified reading skills/concepts. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment with analysis and reflection by:</p> <ul style="list-style-type: none"> <li>– using authentic reading materials (e.g., grade/age appropriate novels, nonfiction text, reference materials, magazines, newspapers, etc.)</li> <li>– applying reading skill/concepts to solve real-world problems that represent a variety of contexts and environments to answer questions and locate information</li> <li>– solving problems that require analyzing or reflecting on the task (e.g., identify meaning of words in poetry, explain the impact of word usage in poetry, compare the event in the story to the different behaviors of main characters, categorize details that support the central idea, summarize theme or idea of a text, compare written works to non-written work of same name/topic, etc.)</li> </ul>
<b><i>Proficient</i></b>	<p>The student demonstrates an independent and accurate understanding of the specified reading skills/concepts. Occasional inaccuracies, which do not interfere with conceptual understanding, may be present. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment by:</p> <ul style="list-style-type: none"> <li>– using authentic reading materials (e.g., grade/age appropriate novels, nonfiction text, reference materials, magazines, newspapers, etc.)</li> <li>– applying reading skill/concept to solve real-world problems that represent a variety of contexts and environments to answer questions and locate information</li> <li>– using relevant details (e.g., context of vocabulary, format of text, information from text, events in a story, different techniques across mediums, etc. )</li> <li>– using reading vocabulary (e.g., vocabulary, rhythm, poetry, prose, repetition, props, scenery, prediction, cause, effect, opinion, etc.)</li> </ul>

<b><i>Apprentice</i></b>	<p>The student demonstrates basic understanding of the specified reading skills/concepts. Inaccuracies may interfere with or limit the conceptual understanding. The student demonstrates some understanding and is able to apply the skills/concepts to a few authentic tasks, materials, and/or environments by:</p> <ul style="list-style-type: none"> <li>– answering the questions (e.g., matches word to meaning, identifies similarities or differences across written work and another medium, etc.)</li> <li>– using relevant details (e.g., context of vocabulary, format of text, information from text, events in a story, different techniques across mediums, etc. )</li> <li>– using reading vocabulary (e.g., vocabulary, rhythm, poetry, prose, repetition, props, scenery, prediction, cause, effect, opinion, etc.)</li> </ul>
<b><i>Novice</i></b>	<p>The student demonstrates little or no understanding of the reading skills/concepts. Inaccuracies interfere with the conceptual understanding. The student demonstrates this by:</p> <ul style="list-style-type: none"> <li>– inaccurate use of details (e.g., context of vocabulary, format of text, information from text, events in a story, different techniques across mediums, etc. )</li> <li>– inaccurate or no use of reading vocabulary (e.g., vocabulary, rhythm, poetry, prose, repetition, props, scenery, prediction, cause, effect, opinion, etc.)</li> </ul>

## Grade Eight Reading Performance Level Descriptors

Performance Level	DESCRIPTOR
<b>Reading Skills/Concepts</b>	<p>Specified reading skills/concepts which represent a portion of the grade level content expectations:</p> <ol style="list-style-type: none"> <li>1. Determine the meaning of tone and impact of figurative and connotative words and phrases as they are used in text; analyze the tone and impact of analogies in text. (Reading 8.1)</li> <li>2. Determine a central idea of text and analyze its relationship to the character, setting, and plot. (Reading 8.2)</li> <li>3. Determine the meaning of tone and impact of figurative, connotative and technical words and phrases as they are used in text; analyze the tone and impact of allusions to the other texts. (Reading 8.3)</li> <li>4. Determine a central idea of text and analyze its relationship to supporting ideas. (Reading 8.4)</li> <li>5. Determine an author's purpose and interpret how the author responds to conflicting viewpoints in the text. (Reading 8.5)</li> <li>6. Compare and contrast the structure of two texts and identify how it contributes to meaning and style. (Reading 8.6)</li> </ol>
<b><i>Distinguished</i></b>	<p>The student exceeds the expectations for demonstrating an independent and accurate understanding of the specified reading skills/concepts. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment with analysis and reflection by:</p> <ul style="list-style-type: none"> <li>– using authentic reading materials (e.g., grade/age appropriate novels, nonfiction text, reference materials, magazines, newspapers, etc.)</li> <li>– applying reading skill/concepts to solve real-world problems that represent a variety of contexts and environments to answer questions and locate information</li> <li>– solving problems that require analyzing or reflecting on the task (e.g., examine the author's purpose of the text, identify opposing viewpoints, compare and analyze structures from two texts, analyze the relationship between the theme or idea of a text to the details, identify meaning, impact and tone of words used in text, etc.)</li> </ul>
<b><i>Proficient</i></b>	<p>The student demonstrates an independent and accurate understanding of the specified reading skills/concepts. Occasional inaccuracies, which do not interfere with conceptual understanding, may be present. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment by:</p> <ul style="list-style-type: none"> <li>– using authentic reading materials (e.g., grade/age appropriate novels, nonfiction text, reference materials, magazines, newspapers, etc.)</li> <li>– applying reading skill/concept to solve real-world problems that represent a variety of contexts and environments to answer questions and locate information</li> <li>– using relevant details (e.g., context or words/phrases, comparison and contrast, purpose, relationships, details, etc.)</li> </ul>



	<ul style="list-style-type: none"> <li>– using reading vocabulary (e.g., structure, context, tone, allusion, central idea character, setting, plot, viewpoint, etc.)</li> </ul>
<b><i>Apprentice</i></b>	<p>The student demonstrates basic understanding of the specified reading skills/concepts. Inaccuracies may interfere with or limit the conceptual understanding. The student demonstrates some understanding and is able to apply the skills/concepts to a few authentic tasks, materials, and/or environments by:</p> <ul style="list-style-type: none"> <li>– answering the questions (e.g., match the word to the meaning, identify the author’s purpose, what is a different viewpoint, etc.)</li> <li>– using relevant details (e.g., context or words/phrases, comparison and contrast, purpose, relationships, details, etc.)</li> <li>– using reading vocabulary (e.g., structure, context, tone, allusion, central idea character, setting, plot, viewpoint, etc.)</li> </ul>
<b><i>Novice</i></b>	<p>The student demonstrates little or no understanding of the reading skills/concepts. Inaccuracies interfere with the conceptual understanding. The student demonstrates this by:</p> <ul style="list-style-type: none"> <li>– inaccurate use of details (e.g., (e.g., context or words/phrases, comparison and contrast, purpose, relationships, details, etc.)</li> <li>– inaccurate or no use of reading vocabulary (e.g., structure, context, tone, allusion, central idea character, setting, plot, viewpoint, etc.)</li> </ul>

## Grade Nine Reading Performance Level Descriptors

Performance Level	DESCRIPTOR
<b>Reading Skills/Concepts</b>	<p>Specified reading skills/concepts which represent a portion of the grade level content expectations:</p> <ol style="list-style-type: none"> <li>1. Determine the meaning, tone and cumulative impact of figurative and connotative words and phrases as they are used in text. (Reading 9.1)</li> <li>2. Analyze how characters develop over the course of a text, interact with other characters, and advance the plot. (Reading 9.2)</li> <li>3. Determine a theme of a text and analyze its development over the course of the text including how it is refined by details; provide an objective summary. (Reading 9.3)</li> <li>4. Determine a central idea of a text and analyze its development over the course of the text including how it is refined by details; provide an objective summary. (Reading 9.4)</li> <li>5. Cite details from the text that support inference. (Reading 9.5)</li> <li>6. Determine an author's purpose in a text and analyze how an author uses rhetoric to advance the purpose. (Reading 9.6)</li> </ol>
<b><i>Distinguished</i></b>	<p>The student exceeds the expectations for demonstrating an independent and accurate understanding of the specified reading skills/concepts. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment with analysis and reflection by:</p> <ul style="list-style-type: none"> <li>– using authentic reading materials (e.g., grade/age appropriate novels, nonfiction text, reference materials, magazines, newspapers, etc.)</li> <li>– applying reading skill/concepts to solve real-world problems that represent a variety of contexts and environments to answer questions and locate information</li> <li>– solving problems that require analyzing or reflecting on the task (e.g., examine the author's purpose of the text, analyze use of rhetoric, identify inferences and details that support it, explain character and theme development and their relationship with text development, identify meaning, impact and tone of words used in text, summarizes the work, etc.)</li> </ul>
<b><i>Proficient</i></b>	<p>The student demonstrates an independent and accurate understanding of the specified reading skills/concepts. Occasional inaccuracies, which do not interfere with conceptual understanding, may be present. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment by:</p> <ul style="list-style-type: none"> <li>– using authentic reading materials (e.g., grade/age appropriate novels, nonfiction text, reference materials, magazines, newspapers, etc.)</li> <li>– applying reading skill/concept to solve real-world problems that represent a variety of contexts and environments to answer questions and locate information</li> <li>– using relevant details (e.g., context, vocabulary, text, details, etc. )</li> <li>– using reading vocabulary (e.g., inference, context, tone, impact, central idea, character, setting, plot, rhetoric, etc.)</li> </ul>

<b><i>Apprentice</i></b>	<p>The student demonstrates basic understanding of the specified reading skills/concepts. Inaccuracies may interfere with or limit the conceptual understanding. The student demonstrates some understanding and is able to apply the skills/concepts to a few authentic tasks, materials, and/or environments by:</p> <ul style="list-style-type: none"> <li>– answering the questions (e.g., matches the word to the meaning, identifies the inference, picks the correct summary, etc.)</li> <li>– using relevant details (e.g., context, vocabulary, text, details, etc. )</li> <li>– using reading vocabulary (e.g., inference, context, tone, impact, central idea, character, setting, plot, rhetoric, etc.)</li> </ul>
<b><i>Novice</i></b>	<p>The student demonstrates little or no understanding of the reading skills/concepts. Inaccuracies interfere with the conceptual understanding. The student demonstrates this by:</p> <ul style="list-style-type: none"> <li>– inaccurate use of details (e.g., context, vocabulary, text, details, etc.)</li> <li>– inaccurate or no use of reading vocabulary (e.g., inference, context, tone, impact, central idea, character, setting, plot, rhetoric, etc.)</li> </ul>

### Grade Four Writing Performance Level Descriptors

Performance Level	DESCRIPTOR
<b>Writing Skills/Concepts</b>	<p>Specified writing skills/concepts which represent a portion of the grade level content expectations:</p> <ol style="list-style-type: none"> <li>1. communicate real experiences by orienting the reader, introducing characters, organizing a sequence of events, using descriptions with concrete words to convey experiences, and provide a conclusion (W 4.1)</li> <li>2. produce clear and organized writing (W 4.2)</li> <li>3. with guidance and support from peers and adults, develop and strengthen writing as needed by planning, and revising (W 4.3)</li> <li>4. with some guidance and support from adults, use technology, including the Internet, to produce writing as well as to interact and collaborate with others (W 4.4)</li> <li>5. conduct short research projects that build knowledge through investigation of different aspects of a topic (W 4.5)</li> <li>6. recall relevant information from experiences or gather relevant information from print and digital sources and categorize information (W 4.6)</li> </ol>
<b><i>Distinguished</i></b>	<p>The student exceeds the expectations for demonstrating an independent and accurate understanding of the specified writing skills/concepts. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment with analysis and reflection by:</p> <ul style="list-style-type: none"> <li>– using authentic writing materials (e.g., outlines, templates, diagrams, etc.)</li> <li>– applying writing skill/concept to solve real-world problems that represent a variety of contexts and environments to answer questions and locate information</li> <li>– solving problems that requires analyzing or reflecting of the task (e.g., analyze what components are necessary in writing about a scenario; reflect on writing to select the best title; sequence the steps in a task; determine the best sources to use to research a topic; analyze writing for needed revision; determine which resources are relevant to a topic; etc.)</li> </ul>
<b><i>Proficient</i></b>	<p>The student demonstrates an independent and accurate understanding of the specified writing skills/concepts. Occasional inaccuracies, which do not interfere with conceptual understanding, may be present. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment by:</p> <ul style="list-style-type: none"> <li>– using authentic writing materials (e.g., outlines, templates, diagrams, etc.)</li> <li>– applying writing skill/concept to solve real-world problems that represent a variety of contexts and environments to answer questions and locate information</li> <li>– using relevant details (e.g., character traits, setting, purpose of writing, type of source, necessary revision, sequence, etc. )</li> <li>– using writing vocabulary (e.g., character, setting, introduction, conclusion, sequence, directions, title, revision, punctuation marks, technology source, Internet site, website, resources, summary, print source, credible, etc.)</li> </ul>

<b><i>Apprentice</i></b>	<p>The student demonstrates basic understanding of the specified writing skills/concepts. Inaccuracies may interfere with or limit the conceptual understanding. The student demonstrates some understanding and is able to apply the skills/concepts to a few authentic tasks and/or environments by:</p> <ul style="list-style-type: none"> <li>– answering the questions (e.g., identify a character, identify a step, identify the conclusion, identify a book as a print source, identify needed punctuation; etc.)</li> <li>– using relevant details (e.g., character traits, setting, purpose of writing, type of source, necessary revision, sequence, etc. )</li> <li>– using writing vocabulary (e.g., character, setting, introduction, conclusion, sequence, directions, title, revision, punctuation marks, technology source, Internet site, website, resources, summary, print source, credible , etc.)</li> </ul>
<b><i>Novice</i></b>	<p>The student demonstrates little or no understanding of the writing skills/concepts. Inaccuracies interfere with the conceptual understanding. The student demonstrates this by:</p> <ul style="list-style-type: none"> <li>– inaccurate use of details (e.g., character traits, setting, purpose of writing, type of source, necessary revision, sequence, etc.)</li> <li>– inaccurate or no use of writing vocabulary (e.g., character, setting, introduction, conclusion, sequence, directions, title, revision, punctuation marks, technology source, Internet site, website, resources, summary, print source, credible , etc.)</li> </ul>

## Grade Five Writing Performance Level Descriptors

Performance Level	DESCRIPTOR
<b>Writing Skills/Concepts</b>	<p>Specified writing skills/concepts which represent a portion of the grade level content expectations:</p> <ol style="list-style-type: none"> <li>1. communicate real experiences by orienting the reader, introducing characters, organizing a sequence of events naturally, using dialogue with concrete words and phrases to convey experiences, and provide a conclusion (W 5.1)</li> <li>2. produce clear and organized writing in which the development is appropriate to task (W 5.2)</li> <li>3. with guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and rewriting (W 5.3)</li> <li>4. recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes (W 5.4)</li> <li>5. with some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others (W 5.5)</li> <li>6. conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic (W 5.6)</li> </ol>
<b><i>Distinguished</i></b>	<p>The student exceeds the expectations for demonstrating an independent and accurate understanding of the specified writing skills/concepts. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment with analysis and reflection by:</p> <ul style="list-style-type: none"> <li>– using authentic writing materials (e.g., outlines, templates, diagrams, etc.)</li> <li>– applying writing skill/concept to solve real-world problems that represent a variety of contexts and environments to answer questions and locate information</li> <li>– solving problems that requires analyzing or reflecting on the task (e.g., reflect on purpose so writing reflects purpose; analyze information so it can be paraphrased; categorize information; analyze purpose and topic to write an introduction; reflect on a topic to determine aspects of the topic; etc.)</li> </ul>
<b><i>Proficient</i></b>	<p>The student demonstrates an independent and accurate understanding of the specified writing skills/concepts. Occasional inaccuracies, which do not interfere with conceptual understanding, may be present. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment by:</p> <ul style="list-style-type: none"> <li>– using authentic writing materials (e.g., outlines, templates, diagrams, etc.)</li> <li>– applying writing skill/concept to solve real-world problems that represent a variety of contexts and environments to answer questions and locate information</li> <li>– using relevant details (e.g., purpose of writing, topic, details, organization, task, etc.)</li> <li>– using writing vocabulary (e.g., punctuation marks, dialogue essay, purpose of writing, purpose of body paragraph, organization, introduction conclusion, peer-review, rewrite, details, summary, publish, format, blog, aspects of a topic,</li> </ul>

	who, what, when, where, why, etc.)
<b><i>Apprentice</i></b>	<p>The student demonstrates basic understanding of the specified writing skills/concepts. Inaccuracies may interfere with or limit the conceptual understanding. The student demonstrates some understanding and is able to apply the skills/concepts to a few authentic tasks and/or environments by:</p> <ul style="list-style-type: none"> <li>– answering the question (e.g., what punctuation is needed for dialogue; what is the best phrase to introduce a topic; what is peer-review; etc.)</li> <li>– using relevant details (e.g., purpose of writing, topic, details, organization, task, etc.)</li> <li>– using writing vocabulary (e.g., punctuation marks, dialogue essay, purpose of writing, purpose of body paragraph, organization, introduction conclusion, peer-review, rewrite, details, summary, publish, format, blog, aspects of a topic, who, what, when, where, why, etc.)</li> </ul>
<b><i>Novice</i></b>	<p>The student demonstrates little or no understanding of the writing skills/concepts. Inaccuracies interfere with the conceptual understanding. The student demonstrates this by:</p> <ul style="list-style-type: none"> <li>– inaccurate use of details (e.g., purpose of writing, topic, details, organization, task, etc.)</li> <li>– inaccurate or no use of writing vocabulary (e.g., punctuation marks, dialogue essay, purpose of writing, purpose of body paragraph, organization, introduction conclusion, peer-review, rewrite, details, summary, publish, format, blog, aspects of a topic, who, what, when, where, why , etc.)</li> </ul>

## Grade Six Writing Performance Level Descriptors

Performance Level	DESCRIPTOR
<b>Writing Skills/Concepts</b>	<p>Specified writing skills/concepts which represent a portion of the grade level content expectations:</p> <ol style="list-style-type: none"> <li>1. Communicate real experiences by engaging and orienting the reader, introducing characters, organizing a sequence of events that unfolds naturally using dialogue, description, and pacing with precise words and phrases, using descriptive details, sensory language and basic transition words to convey experiences and manage time or setting change, and provide a reasonable conclusion (W 6.1)</li> <li>2. produce clear and coherent writing in which the development and organization are appropriate to task (W 6.2)</li> <li>3. with some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, and rewriting (W 6.3)</li> <li>4. gather relevant information from multiple print and digital sources; assess the credibility of each source and quote or paraphrase the data avoiding plagiarism (W 6.4)</li> <li>5. use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others (W 6.5)</li> <li>6. conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate (W 6.6)</li> </ol>
<b><i>Distinguished</i></b>	<p>The student exceeds the expectations for demonstrating an independent and accurate understanding of the specified writing skills/concepts. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment with analysis and reflection by:</p> <ul style="list-style-type: none"> <li>– using authentic writing materials (e.g., outlines, templates, diagrams, etc.)</li> <li>– applying writing skill/concept to solve real-world problems that represent a variety of contexts and environments to answer questions and locate information</li> <li>– solving problems that requires analyzing or reflecting on the task (e.g., reflect on how to engage the reader with writing; analyze a topic to write an introduction; use writing to reflect author’s emotions; analyze the topic to determine a relevant source; analyze the information to refocus writing; etc.)</li> </ul>
<b><i>Proficient</i></b>	<p>The student demonstrates an independent and accurate understanding of the specified writing skills/concepts. Occasional inaccuracies, which do not interfere with conceptual understanding, may be present. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment by:</p> <ul style="list-style-type: none"> <li>– using authentic writing materials (e.g., outlines, templates, diagrams, etc.)</li> <li>– applying writing skill/concept to solve real-world problems that represent a variety of contexts and to answer questions and locate information</li> <li>– using relevant details (e.g., purpose of writing, topic, details, organization, task, necessary punctuation, etc. )</li> <li>– using writing vocabulary (e.g., chronological order, transition words, conclusion, introduction, letter, rewrite, punctuation marks, online source, print</li> </ul>



	source, topic, credible, relevant information, technology, internet, blog, topic, etc.)
<b><i>Apprentice</i></b>	<p>The student demonstrates basic understanding of the specified writing skills/concepts. Inaccuracies may interfere with or limit the conceptual understanding. The student demonstrates some understanding and is able to apply the skills/concepts to a few authentic tasks and/or environments by:</p> <ul style="list-style-type: none"> <li>– answering the questions (e.g., who are the characters, what is the transition words to use for a conclusion, what is an online source, what is the production step of a paper, etc.)</li> <li>– using relevant details (e.g., purpose of writing, topic, details, organization, task, necessary punctuation, etc. )</li> <li>– using writing vocabulary (e.g., chronological order, transition words, conclusion, introduction, letter, rewrite, punctuation marks, online source, print source, topic, credible, relevant information, technology, internet, blog, topic, etc.)</li> </ul>
<b><i>Novice</i></b>	<p>The student demonstrates little or no understanding of the writing skills/concepts. Inaccuracies interfere with the conceptual understanding. The student demonstrates this by:</p> <ul style="list-style-type: none"> <li>– inaccurate use of details (e.g., purpose of writing, topic, details, organization, task, necessary punctuation, etc.)</li> <li>– inaccurate or no use of writing vocabulary (e.g., chronological order, transition words, conclusion, introduction, letter, rewrite, punctuation marks, online source, print source, topic, credible, relevant information, technology, internet, blog, topic, etc.)</li> </ul>

## Grade Eight Writing Performance Level Descriptors

Performance Level	DESCRIPTOR
<b>Writing Skills/Concepts</b>	<p>Specified writing skills/concepts which represent a portion of the grade level content expectations:</p> <ol style="list-style-type: none"> <li>1. communicate real experiences by engaging and orienting the reader by establishing a singular point of view, introducing characters, organizing a sequence of events that unfolds naturally using dialogue, description, and pacing with precise words and phrases, using descriptive details, sensory language basic transition words and phrases to convey experiences and manage time and setting changes and show relationships between experiences, and provide a reasonable conclusions and reflect on the experiences (W 8.1)</li> <li>2. write informative/explanatory texts to examine a topic and analyze relevant content (W 8.2)</li> <li>3. produce clear and coherent writing in which the development, organization, and style are appropriate to task (W 8.3)</li> <li>4. with some guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, and rewriting, focusing on how well purpose and audience have been addressed (W 8.4)</li> <li>5. use technology, including the Internet, to produce and publish writing and present the information and ideas efficiently as well as to interact with others (W 8.5)</li> <li>6. conduct short research projects to answer a question drawing on several sources and generating additional related, focused questions (W 8.6)</li> </ol>
<b><i>Distinguished</i></b>	<p>The student exceeds the expectations for demonstrating an independent and accurate understanding of the specified writing skills/concepts. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment with analysis and reflection by:</p> <ul style="list-style-type: none"> <li>– using authentic writing materials (e.g., outlines, templates, diagrams, etc.)</li> <li>– applying writing skill/concept to solve real-world problems that represent a variety of contexts and environments to answer questions and locate information</li> <li>– solving problems that requires analyzing or reflecting on the task (e.g., determine the intent of a sentence; analyze a topic to determine relevance of information; analyze a situation to determine audience; analyze writing to find and correct errors; analyze writing to broaden information presented about a topic; etc.)</li> </ul>
<b><i>Proficient</i></b>	<p>The student demonstrates an independent and accurate understanding of the specified writing skills/concepts. Occasional inaccuracies, which do not interfere with conceptual understanding, may be present. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment by:</p> <ul style="list-style-type: none"> <li>– using authentic writing materials (e.g., outlines, templates, diagrams, etc.)</li> <li>– applying writing skill/concept to solve real-world problems that represent a variety of contexts and environments to answer questions and locate information</li> </ul>

	<ul style="list-style-type: none"> <li>– using relevant details (e.g., purpose of writing, topic, details, organization, task, necessary punctuation, audience, etc. )</li> <li>– using writing vocabulary (e.g., introduction, conclusion, punctuation marks, relevant information, technology, PowerPoint, Internet, topic, printed source, point of view, organizational structure, audience, informative writing, narrative writing, review, purpose, etc.)</li> </ul>
<b><i>Apprentice</i></b>	<p>The student demonstrates basic understanding of the specified writing skills/concepts. Inaccuracies may interfere with or limit the conceptual understanding. The student demonstrates some understanding and is able to apply the skills/concepts to a few authentic tasks and/or environments by:</p> <ul style="list-style-type: none"> <li>– answering the questions (e.g., why should the author engage the audience, what words indicate writing from a first person point of view, what is the purpose of reviewing writing, why does a writer use the Internet, what is a printed source, etc.)</li> <li>– using relevant details (e.g., purpose of writing, topic, details, organization, task, necessary punctuation, audience, etc. )</li> <li>– using writing vocabulary (e.g., introduction, conclusion, punctuation marks, relevant information, technology, PowerPoint, Internet, topic, printed source, point of view, organizational structure, audience, informative writing, narrative writing, review, purpose, etc.)</li> </ul>
<b><i>Novice</i></b>	<p>The student demonstrates little or no understanding of the writing skills/concepts. Inaccuracies interfere with the conceptual understanding. The student demonstrates this by:</p> <ul style="list-style-type: none"> <li>– inaccurate use of details (e.g., purpose of writing, topic, details, organization, task, necessary punctuation, audience, etc.)</li> <li>– inaccurate or no use of writing vocabulary (e.g., introduction, conclusion, punctuation marks, relevant information, technology, PowerPoint, Internet, topic, printed source, point of view, organizational structure, audience, informative writing, narrative writing, review, purpose , etc.)</li> </ul>

## Grade Ten Writing Performance Level Descriptors

Performance Level	DESCRIPTOR
<b>Writing Skills/Concepts</b>	<p>Specified writing skills/concepts which represent a portion of the grade level content expectations:</p> <ol style="list-style-type: none"> <li>7. communicate real experiences by engaging and orienting the reader by establishing a singular point of view, introducing characters, organizing a sequence of events that unfolds naturally and logically using dialogue, description and pacing with precise words and phrases, using descriptive details, sensory language, a variety of transition words and phrases to create a coherent whole and capture the action, and provide a reasonable conclusion and reflect on the experience (W 10.1)</li> <li>8. produce clear and coherent writing in which the development, organization, and style are appropriate to task and purpose (W 10.2)</li> <li>9. develop writing as needed by planning, revising, editing, rewriting, and focusing on what is significant for a specific purpose and audience (W 10.3)</li> <li>10. use technology, including the Internet, to produce, publish, and update writing products and to display information (W 10.4)</li> <li>11. gather relevant information from multiple print and digital sources; assess the usefulness and credibility of each source in answering the research question; integrate information selectivity to maintain flow of ideas (W 10.5)</li> <li>12. conduct short research projects or solve a problem, demonstrating understanding of the subject under investigation (W 10.6)</li> </ol>
<b><i>Distinguished</i></b>	<p>The student exceeds the expectations for demonstrating an independent and accurate understanding of the specified writing skills/concepts. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment with analysis and reflection by:</p> <ul style="list-style-type: none"> <li>– using authentic writing materials (e.g., outlines, templates, diagrams, etc.)</li> <li>– applying writing skill/concept to solve real-world problems that represent a variety of contexts and environments to answer questions and locate information</li> <li>– solving problems that requires analyzing or reflecting on the task (e.g., analyze to sequence writing; reflect on purpose to determine relevance of a source; analyze to form a strong opening statement; etc.)</li> </ul>
<b><i>Proficient</i></b>	<p>The student demonstrates an independent and accurate understanding of the specified writing skills/concepts. Occasional inaccuracies, which do not interfere with conceptual understanding, may be present. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment by:</p> <ul style="list-style-type: none"> <li>– using authentic writing materials (e.g., outlines, templates, diagrams, etc.)</li> <li>– applying writing skill/concept to solve real-world problems that represent a variety of contexts and environments to answer questions and locate information</li> <li>– using relevant details (e.g., purpose of writing, topic, details, organization, task, necessary punctuation, audience, etc. )</li> <li>– using writing vocabulary (e.g., introduction, conclusion, body paragraphs,</li> </ul>

	exposition, rising action, falling action, climax, resolution, sensory language, transition words, revision, editing, credible, technology, Internet, website, printed source, topic, purpose, hypothesis, relevant information, etc.)
<b><i>Apprentice</i></b>	<p>The student demonstrates basic understanding of the specified writing skills/concepts. Inaccuracies may interfere with or limit the conceptual understanding. The student demonstrates some understanding and is able to apply the skills/concepts to a few authentic tasks and/or environments by:</p> <ul style="list-style-type: none"> <li>– answering the questions (e.g., , etc.)</li> <li>– using relevant details (e.g., purpose of writing, topic, details, organization, task, necessary punctuation, audience, etc. )</li> <li>– using writing vocabulary (e.g., introduction, conclusion, body paragraphs, exposition, rising action, falling action, climax, resolution, sensory language, transition words, revision, editing, credible, technology, Internet, website, printed source, topic, purpose, hypothesis, relevant information, etc.)</li> </ul>
<b><i>Novice</i></b>	<p>The student demonstrates little or no understanding of the writing skills/concepts. Inaccuracies interfere with the conceptual understanding. The student demonstrates this by:</p> <ul style="list-style-type: none"> <li>– inaccurate use of details (e.g., purpose of writing, topic, details, organization, task, necessary punctuation, audience, etc.)</li> <li>– inaccurate or no use of writing vocabulary (e.g., introduction, conclusion, body paragraphs, exposition, rising action, falling action, climax, resolution, sensory language, transition words, revision, editing, credible, technology, Internet, website, printed source, topic, purpose, hypothesis, relevant information, etc.)</li> </ul>

## Grade Eleven Writing Performance Level Descriptors

Performance Level	DESCRIPTOR
<b>Writing Skills/Concepts</b>	<p>Specified writing skills/concepts which represent a portion of the grade level content expectations:</p> <ol style="list-style-type: none"> <li>1. Create or communicate real experiences by engaging and orienting the reader by establishing a singular point of view, introducing characters, organizing a sequence of events that unfolds naturally and logically, using dialogue, description and pacing to develop experiences and characters, using a variety of transition words and phrases to create a coherent whole, using precise words and phrases, descriptive details, and sensory language to capture the action and experiences and develop settings and characters, and provide a reasonable conclusion and reflect on the experiences (W 11.1)</li> <li>2. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience (W 11.2)</li> <li>3. Develop and strengthen writing as needed by planning, revising, editing, rewriting, and focusing on what is most significant for a specific purpose and audience (W 11.3)</li> <li>4. Use technology including the internet to produce, publish and update shared writing products including new arguments and information (W 11.4)</li> <li>5. Gather relevant information from multiple print and digital sources: use advanced searches effectively; assess the usefulness and credibility of each source in terms of the task, purpose, and audience; integrate information selectively to maintain flow of ideas, avoiding plagiarism (W 11.5)</li> <li>6. Conduct short as well as more sustained research projects to answer a question or solve a problem; broaden the inquiry when appropriate; demonstrating understanding of the subject under investigation (W 11.6)</li> </ol>
<b><i>Distinguished</i></b>	<p>The student exceeds the expectations for demonstrating an independent and accurate understanding of the specified writing skills/concepts. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment with analysis and reflection by:</p> <ul style="list-style-type: none"> <li>– using authentic writing materials (e.g., outlines, templates, diagrams, etc.)</li> <li>– applying writing skill/concept to solve real-world problems that represent a variety of contexts and environments to answer questions and locate information</li> <li>– solving problems that requires analyzing or reflecting on the task (e.g., reflect on purpose for writing from the given scenario; analyze writing to find and correct errors; select the best transition phrase for a given purpose; reflect on writing to determine clarity; determine the credibility of a source; analyze the topic and information to broaden the scope of writing; etc.)</li> </ul>
<b><i>Proficient</i></b>	<p>The student demonstrates an independent and accurate understanding of the specified writing skills/concepts. Occasional inaccuracies, which do not interfere with conceptual understanding, may be present. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment by:</p> <ul style="list-style-type: none"> <li>– using authentic writing materials (e.g., outlines, templates, diagrams, etc.)</li> </ul>

	<ul style="list-style-type: none"> <li>– applying writing skill/concept to solve real-world problems that represent a variety of contexts and environments to answer questions and locate information</li> <li>– using relevant details (e.g., purpose of writing, topic, details, organization, task, necessary punctuation, audience, credibility, etc.)</li> <li>– using writing vocabulary (e.g., conclusion, introduction, body paragraphs, credible, technology, PowerPoint, Internet, website, wiki, blog, printed source, topic, audience, purpose, character, setting, brainstorm, personal pronouns, plagiarism, sensory language transition words, revision, editing, etc.)</li> </ul>
<b><i>Apprentice</i></b>	<p>The student demonstrates basic understanding of the specified writing skills/concepts. Inaccuracies may interfere with or limit the conceptual understanding. The student demonstrates some understanding and is able to apply the skills/concepts to a few authentic tasks and/or environments by:</p> <ul style="list-style-type: none"> <li>– answering the questions (e.g., what is the purpose of transition words, define sensory language, how does a writer begin, what is the purpose of editing, etc.)</li> <li>– using relevant details (e.g., purpose of writing, topic, details, organization, task, necessary punctuation, audience, credibility, etc. )</li> <li>– using writing vocabulary (e.g., conclusion, introduction, body paragraphs, credible, technology, PowerPoint, Internet, website, wiki, blog, printed source, topic, audience, purpose, character, setting, brainstorm, personal pronouns, plagiarism, sensory language transition words, revision, editing, etc.)</li> </ul>
<b><i>Novice</i></b>	<p>The student demonstrates little or no understanding of the writing skills/concepts. Inaccuracies interfere with the conceptual understanding. The student demonstrates this by:</p> <ul style="list-style-type: none"> <li>– inaccurate use of details (e.g., purpose of writing, topic, details, organization, task, necessary punctuation, audience, credibility, etc.)</li> <li>– inaccurate or no use of writing vocabulary (e.g., conclusion, introduction, body paragraphs, credible, technology, PowerPoint, Internet, website, wiki, blog, printed source, topic, audience, purpose, character, setting, brainstorm, personal pronouns, plagiarism, sensory language transition words, revision, editing , etc.)</li> </ul>

### Grade Three Mathematics Performance Level Descriptors

Performance Level	DESCRIPTOR
<b>Math Skills/Concepts</b>	<p>Specified math skills/concepts which represent a portion of the grade level content expectations:</p> <ol style="list-style-type: none"> <li>1. student will interpret products of whole numbers (Math 3.1)</li> <li>2. student will demonstrate understanding of place value by rounding two digit whole numbers to the nearest 10 (Math 3.2)</li> <li>3. student will tell time to the nearest minute and measure time intervals by solving word problems (Math 3.3)</li> <li>4. student will generate measurement data by measuring a variety of lengths to the inch or half-inch using standard units of measurement and show the data on a line plot (Math 3.4)</li> <li>5. student will understand that shapes in different categories may share attributes Recognize rhombuses, rectangles and squares as examples of quadrilaterals (Math 3.5)</li> <li>6. student will partition shapes into equal parts and express each part as a unit fraction of the whole (Math 3.6)</li> </ol>
<b><i>Distinguished</i></b>	<p>The student exceeds the expectations for demonstrating an independent and accurate understanding of the specified math skills/concepts. The student demonstrates the ability to apply the skills/concepts to a authentic task and/or environment with analysis and reflection by:</p> <ul style="list-style-type: none"> <li>– solving a real world problem (e.g., using multiplication to determine how many pencils will be needed if 3 students each are given 4 pencils, using rounding to determine if there is enough money to buy an item, be able to tell time using a clock and determine what time lunch is if school starts at 8:30 and lunch begins 3 hours later, use a ruler to measure the length of strips of paper for an art project and use those measurements for a line plot, identifying two dimensional shapes found in the school building and name an attribute they share, slice a pie into 8 equal slices and determine what fraction of the pie is served if 3 slices have been eaten, etc.)</li> <li>– able to solve real world problems that represent a variety of contexts and environments</li> <li>– solving problems that require analyzing or reflecting on the problem (e.g., explaining how to solve a problem such as how to estimate how much money is needed by rounding up, analyzing shapes to determine like and dislike attributes, etc.)</li> </ul>
<b><i>Proficient</i></b>	<p>The student demonstrates an independent and accurate understanding of the specified math skills/concepts. Occasional inaccuracies, which do not interfere with conceptual understanding, may be present. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment by:</p> <ul style="list-style-type: none"> <li>– solving a real world problem (e.g., using multiplication to determine how many pencils will be needed if 3 students each are given 4 pencils, using rounding to determine if there is enough money to buy an item, be able to tell time using a clock and determine what time lunch is if school starts at 8:30 and lunch begins</li> </ul>



	<p>3 hours later, use a ruler to measure the length of strips of paper for an art project and use those measurements for a line plot, identifying two dimensional shapes found in the school building and name an attribute they share, slice a pie into 8 equal slices and determine what fraction of the pie is served if 3 slices have been eaten, etc.)</p> <ul style="list-style-type: none"> <li>– able to solve real world problems that represent a variety of contexts and environments</li> <li>– using relevant details (e.g., inches/half inches, minutes/hours, sides, angles, line plot, etc.)</li> <li>– using math vocabulary (e.g., round, estimate, length, width, height, square, rhombus, rectangle, quadrilateral, side, angle, multiply, whole, part, etc.)</li> </ul>
<b><i>Apprentice</i></b>	<p>The student demonstrates basic understanding of the specified math skills/concepts. Inaccuracies may interfere with or limit the conceptual understanding. The student demonstrates some understanding and is able to apply the skills/concepts to a few authentic tasks or environment by:</p> <ul style="list-style-type: none"> <li>– solving a problem (e.g., computation problems, measuring, identifying shapes, etc.)</li> <li>– using relevant details (e.g., inches/centimeters, sides, angles, line plot, etc.)</li> <li>– using math vocabulary (e.g., round, estimate, length, width, height, square, rhombus, rectangle, quadrilateral, side, angle, multiply, whole, part, etc.)</li> </ul>
<b><i>Novice</i></b>	<p>The student demonstrates little or no understanding of the math skills/concepts. Inaccuracies interfere with the conceptual understanding. The student demonstrates this by:</p> <ul style="list-style-type: none"> <li>– inaccurate use of details (e.g., inches/centimeters, sides, angles, line plot, etc.)</li> <li>– inaccurate or no use of math vocabulary (e.g., round, estimate, length, width, height, square, rhombus, rectangle, quadrilateral, side, angle, multiply, whole, part, etc.)</li> </ul>

## Grade Four Mathematics Performance Level Descriptors

Performance Level	DESCRIPTOR
<b>Math Skills/Concepts</b>	<p>Specified math skills/concepts which represent a portion of the grade level content expectations:</p> <ol style="list-style-type: none"> <li>7. student will multiply and divide to solve word problems (Math 4.1)</li> <li>8. student will generate a number pattern that follows a given rule. Identify apparent features of the pattern. (Math 4.2)</li> <li>9. the student will within the following systems of measurement express measurement of time and length as larger and smaller units and record measurement equivalents in a two column table. (Math 4.3)</li> <li>10. student will apply the area and perimeter formulas for rectangles in real world and mathematical problems. (Math 4.4)</li> <li>11. the student will identify points, lines, perpendicular lines, parallel lines and right, acute, and obtuse angles in two dimensional figures. (Math 4.5)</li> <li>12. student will classify two-dimensional figures based on perpendicular lines, parallel lines and angle measures. (Math 4.6)</li> </ol>
<b><i>Distinguished</i></b>	<p>The student exceeds the expectations for demonstrating an independent and accurate understanding of the specified math skills/concepts. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment with analysis and reflection by:</p> <ul style="list-style-type: none"> <li>– solving a real world problem (e.g., divide the number of cookies in a bag by the number of students to see how many cookies each student would get, use a function table to see how many laps would be walked in one week if one lap was added each day, convert 90 minutes to 1 ½ hours, determine the perimeter of a table to determine the amount of ribbon needed to decorate the sides, use attributes of geometric shapes to complete an art project, etc.)</li> <li>– able to solve real world problems that represent a variety of contexts and environments</li> <li>– solving problems that require analyzing or reflecting on the problem (e.g., explain why multiplication or division would be used to solve a problem; complete a function table and explain the rule and explain the output’s features; explain why to multiple or divide when converting between measurement units; reflect on how shapes can be classified by attributes, etc.)</li> </ul>
<b><i>Proficient</i></b>	<p>The student demonstrates an independent and accurate understanding of the specified math skills/concepts. Occasional inaccuracies, which do not interfere with conceptual understanding, may be present. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment by:</p> <ul style="list-style-type: none"> <li>– solving a real world problem (e.g., divide the number of cookies in a bag by the number of students to see how many cookies each student would get, use a function table to see how many laps would be walked in one week if one lap was added each day, convert 90 minutes to 1 ½ hours, determine the perimeter of a table to determine the amount of ribbon needed to decorate the sides, use attributes of geometric shapes to complete an art project, etc.)</li> <li>– able to solve real world problems that represent a variety of contexts and</li> </ul>

	<p>environments</p> <ul style="list-style-type: none"> <li>– using relevant details (e.g., uses increasing value or decreasing value and even or odd; uses minutes and hours or feet and inches; uses area or perimeter; uses perpendicular and parallel lines and right, acute and obtuse angles, etc.)</li> <li>– using math vocabulary (e.g., multiple, divide, length, width, side, input, output, perpendicular lines, parallel lines, right angle, acute angle, obtuse angle, etc.)</li> </ul>
<b><i>Apprentice</i></b>	<p>The student demonstrates basic understanding of the specified math skills/concepts. Inaccuracies may interfere with or limit the conceptual understanding. The student demonstrates some understanding and is able to apply the skills/concepts to a few authentic tasks or environment by:</p> <ul style="list-style-type: none"> <li>– solving a problem (e.g., computation problems, identifying shapes, etc.)</li> <li>– using relevant details (e.g., uses increasing value or decreasing value and even or odd; uses minutes and hours or feet and inches; uses area or perimeter; uses perpendicular and parallel lines and right, acute and obtuse angles, etc.)</li> <li>– using math vocabulary (e.g., multiply, divide, length, width, side, input, output, perpendicular lines, parallel lines, right angle, acute angle, obtuse angle, etc.)</li> </ul>
<b><i>Novice</i></b>	<p>The student demonstrates little or no understanding of the math skills/concepts. Inaccuracies interfere with the conceptual understanding. The student demonstrates this by:</p> <ul style="list-style-type: none"> <li>– inaccurate use of details (e.g., uses increasing value or decreasing value and even or odd; uses minutes and hours or feet and inches; uses area or perimeter; uses perpendicular and parallel lines and right, acute and obtuse angles, etc.)</li> <li>– inaccurate or no use of math vocabulary (e.g., multiply, divide, length, width, side, input, output, perpendicular lines, parallel lines, right angle, acute angle, obtuse angle, etc.)</li> </ul>

## Grade Five Mathematics Performance Level Descriptors

Performance Level	DESCRIPTOR
<b>Math Skills/Concepts</b>	<p>Specified math skills/concepts which represent a portion of the grade level content expectations:</p> <ol style="list-style-type: none"> <li>7. use place value understanding to round decimals to any place (Math 5.1)</li> <li>8. solve real world problems involving multiplication of fractions (Math 5.2)</li> <li>9. generate two real world numerical patterns using two given rules. Form ordered pairs and graph the pairs on a coordinate plane. (Math 5.3)</li> <li>10. represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane (Math 5.4)</li> <li>11. measure volume by counting unit cubes, using cubic in., cubic ft., and improvised units (Math 5.5)</li> <li>12. understand that attributes belonging to a category of two dimensional figures also belong to all subcategories of that category (Math 5.6)</li> </ol>
<b><i>Distinguished</i></b>	<p>The student exceeds the expectations for demonstrating an independent and accurate understanding of the specified math skills/concepts. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment with analysis and reflection by:</p> <ul style="list-style-type: none"> <li>– solving a real world problem (e.g., rounds \$12.78 to \$13; multiplies <math>\frac{1}{2}</math> by <math>\frac{1}{4}</math>; use a function table to find how much money is saved if \$5 is added per week, show the results as ordered pairs and graph on the coordinate plane; count cubes to determine the volume of a figure; use attributes of 2D figures to categorize; etc.)</li> <li>– able to solve real world problems that represent a variety of contexts and environments</li> <li>– solving problems that require analyzing or reflecting on the problem (e.g., explains how to round \$12.78 to \$13 using place value; solve a multiplication problem using fractions represented by manipulatives; complete a function table and explains how to graph the ordered pairs; explains why all subcategories of quadrilaterals also have four sides; etc.)</li> </ul>
<b><i>Proficient</i></b>	<p>The student demonstrates an independent and accurate understanding of the specified math skills/concepts. Occasional inaccuracies, which do not interfere with conceptual understanding, may be present. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment by:</p> <ul style="list-style-type: none"> <li>– solving a real world problem (e.g., rounds \$12.78 to \$13; multiplies <math>\frac{1}{2}</math> by <math>\frac{1}{4}</math>; use a function table to find how much money is saved if \$5 is added per week, show the results as ordered pairs and graph on the coordinate plane; count cubes to determine the volume of a figure; use attributes of 2D figures to categorize; etc.)</li> <li>– able to solve real world problems that represent a variety of contexts and environments</li> <li>– using relevant details (e.g., uses place value; uses fractions provided; uses x- and y-coordinates, uses cubes; uses attributes such as number of sides, angle measure, parallel and perpendicular lines, etc.)</li> </ul>

	<ul style="list-style-type: none"> <li>– using math vocabulary (e.g., place value, symbols, coordinate plane, ordered pair, volume, sides, angles, parallel lines, perpendicular lines, etc.)</li> </ul>
<b><i>Apprentice</i></b>	<p>The student demonstrates basic understanding of the specified math skills/concepts. Inaccuracies may interfere with or limit the conceptual understanding. The student demonstrates some understanding and is able to apply the skills/concepts to a few authentic tasks or environment by:</p> <ul style="list-style-type: none"> <li>– solving a problem (e.g., solve a written math problem; match an ordered pair to its representation on a graph; match a shape to its attributes, etc.)</li> <li>– using relevant details (e.g., uses place value; uses fractions provided; uses x- and y-coordinates, uses cubes; uses attributes such as number of sides, angle measure, parallel and perpendicular lines, etc.)</li> <li>– using math vocabulary (e.g., place value, symbols, coordinate plane, ordered pair, volume, sides, angles, parallel lines, perpendicular lines etc.)</li> </ul>
<b><i>Novice</i></b>	<p>The student demonstrates little or no understanding of the math skills/concepts. Inaccuracies interfere with the conceptual understanding. The student demonstrates this by:</p> <ul style="list-style-type: none"> <li>– inaccurate use of details (e.g., uses place value; uses fractions provided; uses x- and y-coordinates, uses cubes; uses attributes such as number of sides, angle measure, parallel and perpendicular lines, etc.)</li> <li>– inaccurate or no use of math vocabulary (e.g., place value, symbols, coordinate plane, ordered pair, volume, sides, angles, parallel lines, perpendicular lines, etc.)</li> </ul>

## Grade Six Mathematics Performance Level Descriptors

Performance Level	DESCRIPTOR
<b>Math Skills/Concepts</b>	<p>Specified math skills/concepts which represent a portion of the grade level content expectations:</p> <ol style="list-style-type: none"> <li>7. fluently add and subtract multi-digit decimals using the standard algorithm (Math 6.1)</li> <li>8. use positive and negative numbers to represent quantities in real world contexts (Math 6.2)</li> <li>9. evaluate numerical expressions involving whole number exponents (Math 6.3)</li> <li>10. identify when two expressions are equivalent (Math 6.4)</li> <li>11. find the area of polygons by composing into rectangles or decomposing into other shapes in the context of solving real-world problems (Math 6.5)</li> <li>12. display numerical data in plots on a number line and histograms (Math 6.6)</li> </ol>
<b><i>Distinguished</i></b>	<p>The student exceeds the expectations for demonstrating an independent and accurate understanding of the specified math skills/concepts. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment with analysis and reflection by:</p> <ul style="list-style-type: none"> <li>– solving a real world problem (e.g., determining how much it will cost to buy a pizza for \$3.89 and a bottle of soda for \$1.29 using the standard algorithm; represent a gain of \$5 as a positive integer and a loss of \$5 as a negative integer; find the area of a square with a side measure of 3 inches using <math>3^2</math>; find an expression equivalent to <math>l + w + l + w</math> the formula used to find the perimeter of a rectangle; find the area of an L-shaped room by decomposing into 2 rectangles; construct a histogram showing class election results; etc.)</li> <li>– able to solve real world problems that represent a variety of contexts and environments</li> <li>– solving problems that require analyzing or reflecting on the problem (e.g., reflect on how a multi-digital decimal is set up and explain if and how it is set up incorrectly; explain what makes a number positive or negative; explain how there can be more than one way to compose or decompose a figure to find the same area; etc.)</li> </ul>
<b><i>Proficient</i></b>	<p>The student demonstrates an independent and accurate understanding of the specified math skills/concepts. Occasional inaccuracies, which do not interfere with conceptual understanding, may be present. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment by:</p> <ul style="list-style-type: none"> <li>– solving a real world problem (e.g., determining how much it will cost to buy a pizza for \$3.89 and a bottle of soda for \$1.29 using the standard algorithm; represent a gain of \$5 as a positive integer and a loss of \$5 as a negative integer; find the area of a square with a side measure of 3 inches using <math>3^2</math>; find an expression equivalent to <math>l + w + l + w</math> the formula used to find the perimeter of a rectangle; find the area of an L-shaped room by decomposing into 2 rectangles; construct a histogram showing class election results; etc.)</li> <li>– able to solve real world problems that represent a variety of contexts and environments</li> </ul>

	<ul style="list-style-type: none"> <li>– using relevant details (e.g., uses addition or subtraction, negative or positive, uses multiplication, compose into rectangles, data, numbers, etc.)</li> <li>– using math vocabulary (e.g., positive integer, negative integer, exponent, base, expanded form, rectangle, area, data, histogram, number line plot, data, etc.)</li> </ul>
<b><i>Apprentice</i></b>	<p>The student demonstrates basic understanding of the specified math skills/concepts. Inaccuracies may interfere with or limit the conceptual understanding. The student demonstrates some understanding and is able to apply the skills/concepts to a few authentic tasks or environment by:</p> <ul style="list-style-type: none"> <li>– solving a problem (e.g., identify fractions on worksheet, figure area problems; match element to 2 D shape; complete numerical pattern; etc.)</li> <li>– using relevant details (e.g., uses addition or subtraction, negative or positive, uses multiplication, compose into rectangles, data, numbers, etc.)</li> <li>– using math vocabulary (e.g., positive integer, negative integer, exponent, base, expanded form, rectangle, area, data, histogram, number line plot, data, etc.)</li> </ul>
<b><i>Novice</i></b>	<p>The student demonstrates little or no understanding of the math skills/concepts. Inaccuracies interfere with the conceptual understanding. The student demonstrates this by:</p> <ul style="list-style-type: none"> <li>– inaccurate use of details (e.g., uses addition or subtraction, negative or positive, uses multiplication, compose into rectangles, data, numbers, etc.)</li> <li>– inaccurate or no use of math vocabulary (e.g., positive integer, negative integer, exponent, base, expanded form, rectangle, area, data, histogram, number line plot, data, etc.)</li> </ul>

## Grade Seven Mathematics Performance Level Descriptors

Performance Level	DESCRIPTOR
<b>Math Skills/Concepts</b>	<p>Specified math skills/concepts which represent a portion of the grade level content expectations:</p> <ul style="list-style-type: none"> <li>13. use proportional relationships to solve multistep ratio and percent problems (Math 7.1)</li> <li>14. solve real-life and mathematical problems posed with positive and negative rational numbers (whole numbers, fractions and decimals) converting between forms as appropriate (Math 7.2)</li> <li>15. apply and extend previous understandings of addition and subtraction to add and subtract rational numbers on a horizontal or vertical number line diagram (Math 7.3)</li> <li>16. solve real-world and mathematical problems involving the four operations with rational numbers (Math 7.4)</li> <li>17. solve problems involving scale drawings of geometric figures, including computing actual lengths and areas, (triangles and quadrilaterals) from a scale drawing (Math 7.5)</li> <li>18. solve real-world or mathematical problems involving volume and surface area of three dimensional objects composed of cubes and right prisms (Math 7.6)</li> </ul>
<b><i>Distinguished</i></b>	<p>The student exceeds the expectations for demonstrating an independent and accurate understanding of the specified math skills/concepts. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment with analysis and reflection by:</p> <ul style="list-style-type: none"> <li>– solving a real world problem (e.g., finding how much a \$25 dollar pair of shoes will cost using a 40% off coupon; finding how much a gallon of gas cost when 5 ½ gallons cost 19.47; using a number line to show what the temperature change is in a science experiment; finding actual lengths and areas from a scale drawing for a technical education project; determine volume and surface area of a box for a technical education project; etc.)</li> <li>– able to solve real world problems that represent a variety of contexts and environments</li> <li>– solving problems that require analyzing or reflecting on the problem (e.g., how to determine the strategies needed to set up a proportional relationship in ratio and percent problems; how to determine the strategies needed to solve a word problem involving addition/subtraction and multiplication/division; how to determine strategies needed to convert between whole numbers, fractions and decimals; how to determine strategies to find actual lengths from a scale drawing; describe what surface area and volume measure in 3D shapes and how to determine surface area and volume in 3D shapes; etc.)</li> </ul>
<b><i>Proficient</i></b>	<p>The student demonstrates an independent and accurate understanding of the specified math skills/concepts. Occasional inaccuracies, which do not interfere with conceptual understanding, may be present. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment by:</p> <ul style="list-style-type: none"> <li>– solving a real world problem (e.g., finding how much a \$25 dollar pair of shoes</li> </ul>



	<p>will cost using a 40% off coupon; finding how much a gallon of gas cost when 5 ½ gallons cost 19.47; using a number line to show what the temperature change is in a science experiment; finding actual lengths and areas from a scale drawing for a technical education project; determine volume and surface area of a box for a technical education project; etc.)</p> <ul style="list-style-type: none"> <li>– able to solve real world problems that represent a variety of contexts and environments</li> <li>– using relevant details (e.g., uses addition, subtraction, multiplication or division, rational numbers, measurements, percents, area, surface area and volume, etc.)</li> <li>– using math vocabulary (e.g., add, subtract, multiply, divide, ratio, percent, decimals, fractions, whole numbers, positive and negative numbers, area, perimeter, volume and surface area, etc.)</li> </ul>
<b><i>Apprentice</i></b>	<p>The student demonstrates basic understanding of the specified math skills/concepts. Inaccuracies may interfere with or limit the conceptual understanding. The student demonstrates some understanding and is able to apply the skills/concepts to a few authentic tasks or environment by:</p> <ul style="list-style-type: none"> <li>– solving a problem (e.g., computation problems, identifying area, surface area and volume, etc.)</li> <li>– using relevant details (e.g., uses addition, subtraction, multiplication or division, rational numbers, measurements, percents, area, surface area and volume, etc.)</li> <li>– using math vocabulary (e.g., add, subtract, multiply, divide, ratio, percent, decimals, fractions, whole numbers, positive and negative numbers, area, perimeter, volume and surface area, etc.)</li> </ul>
<b><i>Novice</i></b>	<p>The student demonstrates little or no understanding of the math skills/concepts. Inaccuracies interfere with the conceptual understanding. The student demonstrates this by:</p> <ul style="list-style-type: none"> <li>– inaccurate use of details (e.g., uses addition, subtraction, multiplication or division, rational numbers, measurements, percents, area, surface area and volume, etc.)</li> <li>– inaccurate or no use of math vocabulary (e.g., add, subtract, multiply, divide, ratio, percent, decimals, fractions, whole numbers, positive and negative numbers, area, perimeter, volume and surface area, etc.)</li> </ul>

## Grade Eight Mathematics Performance Level Descriptors

Performance Level	DESCRIPTOR
<b>Math Skills/Concepts</b>	<p>Specified math skills/concepts which represent a portion of the grade level content expectations:</p> <ol style="list-style-type: none"> <li>7. compare the slope of the graph in two different proportional relationships (Math 8.1)</li> <li>8. solve linear equations with one variable (Math 8.2)</li> <li>9. demonstrate an understanding of congruency between two-dimensional figures (Math 8.3)</li> <li>10. demonstrate understanding of similarity between two-dimensional figures (Math 8.4)</li> <li>11. demonstrate an understanding that a function is a rule that assigns to each input exactly one output (Math 8.5)</li> <li>12. given a volume formula, solve real-world problems involving cones, cylinders and spheres (Math 8.6)</li> </ol>
<b><i>Distinguished</i></b>	<p>The student exceeds the expectations for demonstrating an independent and accurate understanding of the specified math skills/concepts. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment with analysis and reflection by:</p> <ul style="list-style-type: none"> <li>– solving a real world problem (e.g., using slope to compare the speed of two different cars; solve the equation <math>2x = 12</math> where 2 is the number of meals purchased and 12 is the total cost of the meals; identify from a group of frames which are congruent; identify from a group of frames which are similar; find the volume of a sphere using a formula; etc.)</li> <li>– able to solve real world problems that represent a variety of contexts and environments</li> <li>– solving problems that require analyzing or reflecting on the problem (e.g., explaining why the slope of the faster of two cars is steeper; explaining why two figures are congruent; explaining why two figures are similar; explaining why the relation between a student and his/her age is a function; etc.)</li> </ul>
<b><i>Proficient</i></b>	<p>The student demonstrates an independent and accurate understanding of the specified math skills/concepts. Occasional inaccuracies, which do not interfere with conceptual understanding, may be present. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment by:</p> <ul style="list-style-type: none"> <li>– solving a real world problem (e.g., using slope to compare the speed of two different cars; solve the equation <math>2x = 12</math> where 2 is the number of meals purchased and 12 is the total cost of the meals; identify from a group of frames which are congruent; identify from a group of frames which are similar; find the volume of a sphere using a formula; etc.)</li> <li>– able to solve real world problems that represent a variety of contexts and environments</li> <li>– using relevant details (e.g., steepness, size, shape, input, output, measurements, etc.)</li> <li>– using math vocabulary (e.g., slope, add, subtract, multiply, divide, variable,</li> </ul>

	congruent, similar, proportional, function, input, output, cone, cylinder, sphere, height, radius, volume, etc.)
<b><i>Apprentice</i></b>	<p>The student demonstrates basic understanding of the specified math skills/concepts. Inaccuracies may interfere with or limit the conceptual understanding. The student demonstrates some understanding and is able to apply the skills/concepts to a few authentic tasks or environment by:</p> <ul style="list-style-type: none"> <li>– solving a problem (e.g., using slope to compare the speed of two different cars; solve the equation <math>2x = 12</math> where 2 is the number of meals purchased and 12 is the total cost of the meals; identify from a group of frames which are congruent; identify from a group of frames which are similar; find the volume of a sphere using a formula; etc.)</li> <li>– using relevant details (e.g., steepness, size, shape, input, output, measurements, etc.)</li> <li>– using math vocabulary (e.g., slope, add, subtract, multiply, divide, variable, congruent, similar, proportional, function, input, output, cone, cylinder, sphere, height, radius, volume, etc.)</li> </ul>
<b><i>Novice</i></b>	<p>The student demonstrates little or no understanding of the math skills/concepts. Inaccuracies interfere with the conceptual understanding. The student demonstrates this by:</p> <ul style="list-style-type: none"> <li>– inaccurate use of details (e.g., steepness, size, shape, input, output, measurements, etc.)</li> <li>– inaccurate or no use of math vocabulary (e.g., slope, add, subtract, multiply, divide, variable, congruent, similar, proportional, function, input, output, cone, cylinder, sphere, height, radius, volume, etc.)</li> </ul>

## Grade Ten Mathematics Performance Level Descriptors

Performance Level	DESCRIPTOR
<b>Math Skills/Concepts</b>	<p>Specified math skills/concepts which represent a portion of the grade level content expectations:</p> <ol style="list-style-type: none"> <li>1. choose and interpret the scale and the origin in graphs and data displays (Math 10.1)</li> <li>2. represent data on the real number line using histograms and dot plots (Math 10.2)</li> <li>3. use statistics appropriate to the shape of the data distribution to compare center (median, mode) of two or more different data sets (Math 10.3)</li> <li>4. when given equations using two or more variables, graph their relationship on a coordinate axis (Math 10.4)</li> <li>5. solve linear equations and inequalities in one variable (Math 10.5)</li> <li>6. use geometric shapes and their properties to describe objects (Math 10.6)</li> </ol>
<b><i>Distinguished</i></b>	<p>The student exceeds the expectations for demonstrating an independent and accurate understanding of the specified math skills/concepts. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment with analysis and reflection by:</p> <ul style="list-style-type: none"> <li>– solving a real world problem (e.g., determining the appropriate scale to use on a graph showing population of hundred thousands; create a histogram showing the results of a die roll experiment; compare the median and mode of for the sales prices of homes in two different years; graph the equation of <math>5x = y</math> where <math>x</math> is the number of hours worked and <math>y</math> is earnings; co solve the equation <math>2x = 12</math> where 2 is the number of meals purchased and 12 is the total cost of the meals; describe a paned window in terms of geometric shapes; etc.)</li> <li>– able to solve real world problems that represent a variety of contexts and environments</li> <li>– solving problems that require analyzing or reflecting on the problem (e.g., compare the data in two different displays that have different scales; explaining how to solve a linear inequality; explaining how median and mode are related; etc.)</li> </ul>
<b><i>Proficient</i></b>	<p>The student demonstrates an independent and accurate understanding of the specified math skills/concepts. Occasional inaccuracies, which do not interfere with conceptual understanding, may be present. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment by:</p> <ul style="list-style-type: none"> <li>– solving a real world problem (e.g., determining the appropriate scale to use on a graph showing population of hundred thousands; create a histogram showing the results of a die roll experiment; compare the median and mode of for the sales prices of homes in two different years; graph the equation of <math>5x = y</math> where <math>x</math> is the number of hours worked and <math>y</math> is earnings; co solve the equation <math>2x = 12</math> where 2 is the number of meals purchased and 12 is the total cost of the meals; describe a paned window in terms of geometric shapes; etc.)</li> <li>– able to solve real world problems that represent a variety of contexts and environments</li> </ul>

	<ul style="list-style-type: none"> <li>– using relevant details (e.g., uses scale to solve problem, uses data to solve problem, uses given measurements, uses given formula, etc.)</li> <li>– using math vocabulary (e.g., scale, origin, histogram, dot plot, vertical axis, horizontal axis, x-axis, y-axis, median, mode, variable, equation, inequality, circle, square, rectangle, triangle, symmetry, add, subtract, multiply, divide, etc.)</li> </ul>
<b><i>Apprentice</i></b>	<p>The student demonstrates basic understanding of the specified math skills/concepts. Inaccuracies may interfere with or limit the conceptual understanding. The student demonstrates some understanding and is able to apply the skills/concepts to a few authentic tasks or environment by:</p> <ul style="list-style-type: none"> <li>– solving a problem (e.g., computation problems, equation problems, inequalities, identifying shapes and their properties, etc.)</li> <li>– using relevant details (e.g., uses data in tables, graphs or lists to solve problem, uses given measurements, uses given formula, etc.)</li> <li>– using math vocabulary (e.g., scale, origin, histogram, dot plot, vertical axis, horizontal axis, x-axis, y-axis, median, mode, variable, equation, inequality, circle, square, rectangle, triangle, symmetry, add, subtract, multiply, divide, etc.)</li> </ul>
<b><i>Novice</i></b>	<p>The student demonstrates little or no understanding of the math skills/concepts. Inaccuracies interfere with the conceptual understanding. The student demonstrates this by:</p> <ul style="list-style-type: none"> <li>– inaccurate use of details (e.g., uses scale to solve problem, uses data to solve problem, uses given measurements, uses given formula, etc.)</li> <li>– inaccurate or no use of math vocabulary (e.g., scale, origin, histogram, dot plot, vertical axis, horizontal axis, x-axis, y-axis, median, mode, variable, equation, inequality, circle, square, rectangle, triangle, symmetry, add, subtract, multiply, divide, etc.)</li> </ul>

## Grade Four Science Performance Level Descriptors

Performance Level	DESCRIPTOR
<b>Science Skills/Concepts</b>	<p>Specified science skills/concepts which represent a portion of the grade level content expectations:</p> <ul style="list-style-type: none"> <li>13. students will infer causes and effects of pushes and pulls (forces) on objects based on representations or interpretations of straight-line movement/motion in charts, graphs, and qualitative comparisons (SC 4.1)</li> <li>14. students will compare a variety of life cycles of plants and animals in order to classify and make inferences about an organism (SC 4.2)</li> <li>15. students will analyze patterns and make generalizations about the basic relationships of plants and animals in an ecosystem (food chain) (SC 4.3)</li> <li>16. students will compare different structures and functions of plants and animals that contribute to the growth, survival, and reproduction of organisms. Students will make inferences about the relationship between structure and function in organisms (SC 4.4)</li> <li>17. students will describe human interactions in the environment where they live; classify the interactions as beneficial or harmful to the environment using data/evidence to support conclusions (SC 4.5)</li> </ul>
<b><i>Distinguished</i></b>	<p>The student exceeds the expectations for demonstrating an independent and accurate understanding of the specified science skills/concepts. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment with analysis and reflection by:</p> <ul style="list-style-type: none"> <li>– using authentic science materials (e.g., grade/age appropriate texts, reference materials, lab or experiment materials, technology, newspapers, etc.)</li> <li>– applying science skill/concept to solve real-world problems that represent a variety of contexts and environments to answer questions and locate information</li> <li>– solving problems that requires analyzing or reflecting on the task (e.g., explain the differences between the structure or function of a plant to that of an animal; describe the life cycle of a plant or animal; replace a harmful interaction with a beneficial interaction [e.g., littering versus cleaning up a roadway]; etc.)</li> </ul>
<b><i>Proficient</i></b>	<p>The student demonstrates an independent and accurate understanding of the specified science skills/concepts. Occasional inaccuracies, which do not interfere with conceptual understanding, may be present. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment by:</p> <ul style="list-style-type: none"> <li>– using authentic science materials (e.g., grade/age appropriate texts, reference materials, lab or experiment materials, technology, newspapers, etc.)</li> <li>– applying science skill/concept to solve real-world problems that represent a variety of contexts and environments to answer questions and locate information</li> <li>– using relevant details (e.g., consumer, producer, food source, plant, animal, function, structure, life, growth, reproduction, death, etc.)</li> <li>– using science vocabulary (e.g., consumer, producer, plant, animal, function, structure, life, growth, death, etc.)</li> </ul>

<b><i>Apprentice</i></b>	<p>The student demonstrates basic understanding of the specified science skills/concepts. Inaccuracies may interfere with or limit the conceptual understanding. The student demonstrates some understanding by applying the skills/concepts to a few authentic tasks, materials, and/or environment by:</p> <ul style="list-style-type: none"> <li>– answering the question (e.g., matches word to meaning, identifies a force as a push or a pull; identifies plants and/or animals as either a producer or a consumer; etc.)</li> <li>– using relevant details (e.g., sequences the life cycle of a plant or animal, matches plant or animal to its food source, etc.)</li> <li>– using science vocabulary (e.g., consumer, producer, plant, animal, function, structure, life, growth, death, etc.)</li> </ul>
<b><i>Novice</i></b>	<p>The student demonstrates little or no understanding of the science skills/concepts. Inaccuracies interfere with the conceptual understanding. The student demonstrates this by:</p> <ul style="list-style-type: none"> <li>– inaccurate use of details (e.g., sequences the life cycle of a plant or animal, matches plant or animal to its food source, etc.)</li> <li>– inaccurate or no use of science vocabulary (e.g., consumer, producer, plant, animal, function, structure, life, growth, death, etc.)</li> </ul>

## Grade Seven Science Performance Level Descriptors

Performance Level	DESCRIPTOR
<b>Science Skills/Concepts</b>	<p>Specified science skills/concepts which represent a portion of the grade level content expectations:</p> <ul style="list-style-type: none"> <li>19. students will classify elements and compounds according to their properties; compare properties of different combinations of elements (SC 7.1)</li> <li>20. students will explain cause and effect relationship between simple observable motion and unbalanced forces (SC 7.2)</li> <li>21. students will make inferences and predictions related to changes in the Earth's surface or atmosphere based on data/evidence (SC 7.3)</li> <li>22. describe the role of genes/chromosomes in passing on information from one generation to another (heredity); compare inherited and learned traits (SC 7.4)</li> <li>23. students will compare abiotic and biotic factors in an ecosystem to explain consequences of change in one or more factors (SC 7.5)</li> </ul>
<b><i>Distinguished</i></b>	<p>The student exceeds the expectations for demonstrating an independent and accurate understanding of the specified science skills/concepts. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment with analysis and reflection by:</p> <ul style="list-style-type: none"> <li>– using authentic science materials (e.g., grade/age appropriate texts, reference materials, lab or experiment materials, technology, newspapers, etc.)</li> <li>– applying science skill/concept to solve real-world problems that represent a variety of contexts and environments to answer questions and locate information</li> <li>– solving problems that requires analyzing or reflecting on the task (e.g., explain how a change in one factor of an ecosystem can affect the whole system; explain the cause and effect relationship between a baseball and a bat [straight line motion and unbalanced forces]; analyze forces and explain what changes in the Earth's surface will result; create a model to demonstrate how genetic traits are passed on to offspring; etc.)</li> </ul>
<b><i>Proficient</i></b>	<p>The student demonstrates an independent and accurate understanding of the specified science skills/concepts. Occasional inaccuracies, which do not interfere with conceptual understanding, may be present. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment by:</p> <ul style="list-style-type: none"> <li>– using authentic science materials (e.g., grade/age appropriate texts, reference materials, lab or experiment materials, technology, newspapers, etc.)</li> <li>– applying science skill/concept to solve real-world problems that represent a variety of contexts and environments to answer questions and locate information</li> <li>– using relevant details (e.g., living and non-living, differentiate between physical and chemical properties, identify the effects of forces on the Earth's surface or atmosphere, etc. )</li> <li>– using science vocabulary (e.g., living, non-living, genetic traits, chemical properties, physical properties, elements, surface, atmosphere, forces, etc.)</li> </ul>



<b><i>Apprentice</i></b>	<p>The student demonstrates basic understanding of the specified science skills/concepts. Inaccuracies may interfere with or limit the conceptual understanding. The student demonstrates some understanding by applying the skills/concepts to a few authentic tasks, materials, and/or environment by:</p> <ul style="list-style-type: none"> <li>– answering the questions (e.g., matches word to meaning, identifies forces that could effect the Earth’s surface or atmosphere, identifies the genetic trait passed on to offspring, etc.)</li> <li>– using relevant details (e.g., categorize living and non-living, differentiate between physical and chemical properties, identify the effects of forces on the Earth’s surface or atmosphere, etc. )</li> <li>– using science vocabulary (e.g., living, non-living, genetic traits, chemical properties, physical properties, elements, surface, atmosphere, forces, etc.)</li> </ul>
<b><i>Novice</i></b>	<p>The student demonstrates little or no understanding of the science skills/concepts. Inaccuracies interfere with the conceptual understanding. The student demonstrates this by:</p> <ul style="list-style-type: none"> <li>– inaccurate use of details (e.g., categorize living and non-living, differentiate between physical and chemical properties, identify the effects of forces on the Earth’s surface or atmosphere, etc.)</li> <li>– inaccurate or no use of science vocabulary (e.g., living, non-living, genetic traits, chemical properties, physical properties, elements, surface, atmosphere, forces, etc.)</li> </ul>

## Grade Eleven Science Performance Level Descriptors

Performance Level	DESCRIPTOR
<b>Science Skills/Concepts</b>	<p>Specified science skills/concepts which represent a portion of the grade level content expectations:</p> <ol style="list-style-type: none"> <li>1. students will classify or make generalizations about elements from data of observed patterns in atomic structure and/or position on the periodic table (SC 11.1)</li> <li>2. students will select or construct accurate and appropriate representations for motion (visual, graphical and mathematical); defend conclusions/explanations about the motion of objects and real-life phenomena from evidence/data (SC 11.2)</li> <li>3. students will explain phenomena (falling objects, planetary motion, satellite motion) related to gravity; describe the factors that affect gravitational force (SC 11.3)</li> <li>4. students will explain the relationship between sexual reproduction (meiosis) and the transmission of genetic information; draw conclusions/make predictions based on heredity evidence/data (pedigree, punnet squares) (SC 11.4)</li> <li>5. students will predict the consequences of changes in resources to a population; select or defend solutions to real-world problems of population control (SC 11.5)</li> </ol>
<b><i>Distinguished</i></b>	<p>The student exceeds the expectations for demonstrating an independent and accurate understanding of the specified science skills/concepts. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment with analysis and reflection by:</p> <ul style="list-style-type: none"> <li>– using authentic science materials (e.g., grade/age appropriate texts, reference materials, lab or experiment materials, technology, newspapers, etc.)</li> <li>– applying science skill/concept to solve real-world problems that represent a variety of contexts and environments to answer questions and locate information</li> <li>– solving problems that requires analyzing or reflecting on the task (e.g., analyze what will happen to the deer population if hunting is banned; observe the rate at which two items of different mass fall and analyze the differences as they relate to the mass of the objects; describe properties of elements and explain why certain elements have similar properties; etc.)</li> </ul>
<b><i>Proficient</i></b>	<p>The student demonstrates an independent and accurate understanding of the specified science skills/concepts. Occasional inaccuracies, which do not interfere with conceptual understanding, may be present. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment by:</p> <ul style="list-style-type: none"> <li>– using authentic science materials (e.g., grade/age appropriate texts, reference materials, lab or experiment materials, technology, newspapers, etc.)</li> <li>– applying science skill/concept to solve real-world problems that represent a variety of contexts and environments to answer questions and locate information</li> <li>– using relevant details (e.g., the number and placement of electrons and/or</li> </ul>

	<p>neutrons in an element, the process of cell division, how mass affects gravity, describing the effects force on an object in motion, etc.)</p> <ul style="list-style-type: none"> <li>– using science vocabulary (e.g., electrons, neutrons, force, gravity, mass, air resistance, cell division, stable, unstable, organisms, environment, etc.)</li> </ul>
<b><i>Apprentice</i></b>	<p>The student demonstrates basic understanding of the specified science skills/concepts. Inaccuracies may interfere with or limit the conceptual understanding. The student demonstrates some understanding by applying the skills/concepts to a few authentic tasks, materials, and/or environment by:</p> <ul style="list-style-type: none"> <li>– answering the questions (e.g., matches word to the meaning, matches an element to a certain family, predicts the correct movement of a moving object when force is applied, etc.)</li> <li>– using relevant details (e.g., the number and placement of electrons and/or neutrons in an element, the process of cell division, how mass affects gravity, describing the effects force on an object in motion, etc.)</li> <li>– using science vocabulary (e.g., electrons, neutrons, force, gravity, mass, air resistance, cell division, stable, unstable, organisms, environment, etc.)</li> </ul>
<b><i>Novice</i></b>	<p>The student demonstrates little or no understanding of the science skills/concepts. Inaccuracies interfere with the conceptual understanding. The student demonstrates this by:</p> <ul style="list-style-type: none"> <li>– inaccurate use of details (e.g., the number and placement of electrons and/or neutrons in an element, the process of cell division, how mass affects gravity, describing the effects force on an object in motion, etc.)</li> <li>– inaccurate or no use of science vocabulary (e.g., electrons, neutrons, force, gravity, mass, air resistance, cell division, stable, unstable, organisms, environment, etc.)</li> </ul>

## Grade Five Social Studies Performance Level Descriptors

Performance Level	DESCRIPTOR
<b>Social Studies Skills/Concepts</b>	<p>Specified social studies skills/concepts which represent a portion of the grade level content expectations:</p> <ol style="list-style-type: none"> <li>7. student will identify and compare the cultures of diverse groups and explain why people explored and settled in Kentucky (SS 5.1)</li> <li>8. students will give examples of conflicts between individuals or groups today and describe appropriate conflict resolution strategies (e.g., compromise, cooperation, communication) to use (SS 5.2)</li> <li>9. students will identify the three branches of Kentucky government, explain the basic duties of each branch (executive- enforce the laws, legislative- make the laws, judicial-interpret the law) and identify important states offices/leaders (Governor, Lieutenant Governor, General Assembly, Senate, House, representatives, senators, Kentucky Supreme Court, judges) associated with each branch (SS 5.3)</li> <li>10. students will use geographic tools (e.g., maps, charts, graphs) to identify and describe natural resources and other physical characteristics (e.g., major landforms, major bodies of water, weather, climate, roads, bridges) in regions of Kentucky and the United States (SS 5.4)</li> </ol>
<b><i>Distinguished</i></b>	<p>The student exceeds the expectations for demonstrating an independent and accurate understanding of the specified social studies skills/concepts. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment with analysis and reflection by:</p> <ul style="list-style-type: none"> <li>– using authentic social studies materials (e.g., grade/age appropriate texts, nonfiction text, reference materials, technology, magazines, newspapers, etc.)</li> <li>– applying social studies skill/concept to solve real-world problems that represent a variety of contexts and environments to answer questions and locate information</li> <li>– solving problems that requires analyzing or reflecting on the task (e.g., compare the cultures of settlers and Native Americans; explain how two friends would resolve a conflict over what video game to play; explain the duties of the senate; using a map determine what best area would be best for mining coal; etc.)</li> </ul>
<b><i>Proficient</i></b>	<p>The student demonstrates an independent and accurate understanding of the specified social studies skills/concepts. Occasional inaccuracies, which do not interfere with conceptual understanding, may be present. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment by:</p> <ul style="list-style-type: none"> <li>– using authentic social studies materials (e.g., grade/age appropriate texts, nonfiction text, reference materials, technology, magazines, newspapers, etc.))</li> <li>– applying social studies skill/concept to solve real-world problems that represent a variety of contexts and environments to answer questions and locate information</li> <li>– using relevant details (e.g., descriptions, sentence meaning, charts, graphs, map</li> </ul>

	<p>keys, symbols, etc. )</p> <ul style="list-style-type: none"> <li>– using social studies vocabulary (e.g., Native Americans, settlers, conflict, compromise, cooperation, executive branch, legislative branch, judicial branch, representatives, senators, etc.)</li> </ul>
<b><i>Apprentice</i></b>	<p>The student demonstrates basic understanding of the specified social studies skills/concepts. Inaccuracies may interfere with or limit the conceptual understanding. The student demonstrates some understanding and is able to apply the skills/concepts to a few authentic tasks, materials, and/or environments by:</p> <ul style="list-style-type: none"> <li>– answering the questions (e.g., match word to meaning; identifies branch of government; identifies city on map; etc.)</li> <li>– using relevant details (e.g., descriptions, sentence meaning, charts, graphs, map keys, symbols, etc. )</li> <li>– using social studies vocabulary (e.g., Native Americans, settlers, conflict, compromise, cooperation, executive branch, legislative branch, judicial branch, representatives, senators, etc.)</li> </ul>
<b><i>Novice</i></b>	<p>The student demonstrates little or no understanding of the social studies skills/concepts. Inaccuracies interfere with the conceptual understanding. The student demonstrates this by:</p> <ul style="list-style-type: none"> <li>– inaccurate use of details (e.g., descriptions, sentence meaning, charts, graphs, map keys, symbols, etc.)</li> <li>– inaccurate or no use of social studies vocabulary (e.g., Native Americans, settlers, conflict, compromise, cooperation, executive branch, legislative branch, judicial branch, representatives, senators, etc.)</li> </ul>

## Grade Eight Social Studies Performance Level Descriptors

Performance Level	DESCRIPTOR
<b>Social Studies Skills/Concepts</b>	<p>Specified social studies skills/concepts which represent a portion of the grade level content expectations:</p> <p>18. students will explain how history is a series of connected events shaped by multiple cause-and-effect relationships and give examples of those relationships (SS 8.1)</p> <p>19. students will explain how compromise and cooperation are possible choices to resolve conflict among individuals and groups in the present day (SS 8.2)</p> <p>20. students will explain and give examples of how, in order for the U.S. government to function as a democracy, citizens must assume responsibilities (e.g., participating in community activities, voting in elections) and duties (e.g., obeying the law, paying taxes, serving on a jury, registering for the military) (SS 8.3)</p> <p>21. students will use a variety of geographic tools (maps, photographs, charts, graphs, data bases, satellite images) to interpret patterns and locations on Earth's surface in the present day (SS 8.4)</p>
<b><i>Distinguished</i></b>	<p>The student exceeds the expectations for demonstrating an independent and accurate understanding of the specified social studies skills/concepts. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment with analysis and reflection by:</p> <ul style="list-style-type: none"> <li>– using authentic social studies materials (e.g., grade/age appropriate texts, nonfiction text, reference materials, technology, magazines, newspapers, etc.)</li> <li>– applying social studies skill/concept to solve real-world problems that represent a variety of contexts and environments to answer questions and locate information</li> <li>– solving problems that requires analyzing or reflecting on the task (e.g., explain the actions which led to the revolutionary war; explain how two friends would resolve a conflict over what video game to play; give an example of a citizens duty in a democracy; from a map determine what would be the best area for mountain climbing; etc.)</li> </ul>
<b><i>Proficient</i></b>	<p>The student demonstrates an independent and accurate understanding of the specified social studies skills/concepts. Occasional inaccuracies, which do not interfere with conceptual understanding, may be present. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment by:</p> <ul style="list-style-type: none"> <li>– using authentic social studies materials (e.g., grade/age appropriate texts, nonfiction text, reference materials, technology, magazines, newspapers, etc.)</li> <li>– applying social studies skill/concept to solve real-world problems that represent a variety of contexts and environments to answer questions and locate information</li> <li>– using relevant details (e.g., descriptions, sentence meaning, charts, graphs, map keys, symbols, etc.)</li> <li>– using social studies vocabulary (e.g., conflict, compromise, cooperation, democracy, voting, citizen, duty, etc.)</li> </ul>

<b><i>Apprentice</i></b>	<p>The student demonstrates basic understanding of the specified social studies skills/concepts. Inaccuracies may interfere with or limit the conceptual understanding. The student demonstrates some understanding and is able to apply the skills/concepts to a few authentic tasks, materials, and/or environments by:</p> <ul style="list-style-type: none"> <li>– answering the question (e.g., match word to meaning; identifies an event in history; identifies a city on map; etc.)</li> <li>– using relevant details (e.g., descriptions, sentence meaning, charts, graphs, map keys, symbols, etc.)</li> <li>– using social studies vocabulary (e.g., conflict, compromise, cooperation, democracy, voting, citizen, duty, etc.)</li> </ul>
<b><i>Novice</i></b>	<p>The student demonstrates little or no understanding of the social studies skills/concepts. Inaccuracies interfere with the conceptual understanding. The student demonstrates this by:</p> <ul style="list-style-type: none"> <li>– inaccurate use of details (e.g., descriptions, sentence meaning, charts, graphs, map keys, symbols, etc.)</li> <li>– inaccurate or no use of social studies vocabulary (e.g., conflict, compromise, cooperation, democracy, voting, citizen, duty, etc.)</li> </ul>

## Grade Twelve Social Studies Performance Level Descriptors

Performance Level	DESCRIPTOR
<b>Social Studies Skills/Concepts</b>	<p>Specified social studies skills/concepts which represent a portion of the grade level content expectations:</p> <ol style="list-style-type: none"> <li>13. students will explain how the second half of the 20th century was characterized by rapid social, political, and economic changes that created new challenges (e.g., population growth, diminishing natural resources, environmental concerns, human rights issues, technological and scientific advances, shifting political alliances, globalization of the economy) in countries around the world, and give examples of how countries have addressed these challenges (SS 12.1)</li> <li>14. students will explain and give examples of how numerous factors influence the supply and demand of products (e.g. supply – technology, costs of inputs, number of sellers: demand — income, utility, price of similar products, consumers’ preferences) (SS 12.2)</li> <li>15. students will explain how belief systems, knowledge, technology and behavior patterns define cultures and help to explain historical perspectives and events in the modern world (1550 A.D. to present) and United States (Reconstruction to present) (SS 12.3)</li> <li>16. students will analyze how powers of government are distributed and shared among levels and branches and evaluate how this distribution of powers protects the “common good” (e.g., Congress legislates on behalf of the people; the President represents the people as a nation; the Supreme Court acts on behalf of the people as a whole when it interprets the Constitution) (SS 12.4)</li> </ol>
<b><i>Distinguished</i></b>	<p>The student exceeds the expectations for demonstrating an independent and accurate understanding of the specified social studies skills/concepts. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment with analysis and reflection by:</p> <ul style="list-style-type: none"> <li>– using authentic social studies materials (e.g., grade/age appropriate texts, nonfiction text, reference materials, technology, magazines, newspapers, etc.)</li> <li>– applying social studies skill/concept to solve real-world problems that represent a variety of contexts and environments to answer questions and locate information</li> <li>– solving problems that requires analyzing or reflecting on the task (e.g., explain how China is dealing with its rapid growth in population; explain what will happen to the demand for gasoline if the cost of oil increases due to a war; explain how the industrial revolution changed American society; explain how the branches of government protect the common good; etc.)</li> </ul>
<b><i>Proficient</i></b>	<p>The student demonstrates an independent and accurate understanding of the specified social studies skills/concepts. Occasional inaccuracies, which do not interfere with conceptual understanding, may be present. The student demonstrates the ability to apply the skills/concepts to an authentic task and/or environment by:</p> <ul style="list-style-type: none"> <li>– using authentic social studies materials (e.g., grade/age appropriate texts, nonfiction text, reference materials, technology, magazines, newspapers, etc.)</li> <li>– applying social studies skill/concept to solve real-world problems that represent</li> </ul>



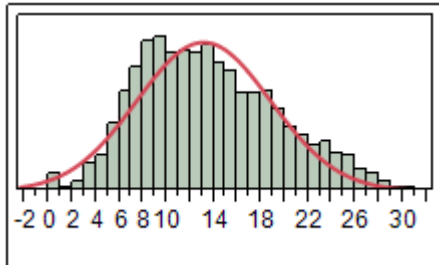
	<p>a variety of contexts and environments to answer questions and locate information</p> <ul style="list-style-type: none"> <li>– using relevant details (e.g., the challenge, changes, factors of supply and demand, belief systems, technology, cause and effect, etc. )</li> <li>– using social studies vocabulary (e.g., population, natural resource, environment, global economy, supply, demand, cost, income, consumer preference, legislative branch, executive branch, judicial branch, veto, Constitution, etc.)</li> </ul>
<b><i>Apprentice</i></b>	<p>The student demonstrates basic understanding of the specified social studies skills/concepts. Inaccuracies may interfere with or limit the conceptual understanding. The student demonstrates some understanding and is able to apply the skills/concepts to a few authentic tasks, materials, and/or environments by:</p> <ul style="list-style-type: none"> <li>– answering the questions (e.g., identify a natural resource, identify a power of the legislative branch, etc.)</li> <li>– using relevant details (e.g., the challenge, changes, factors of supply and demand, belief systems, technology, cause and effect, etc. )</li> <li>– using social studies vocabulary (e.g., population, natural resource, environment, global economy, supply, demand, cost, income, consumer preference, legislative branch, executive branch, judicial branch, veto, Constitution, etc.)</li> </ul>
<b><i>Novice</i></b>	<p>The student demonstrates little or no understanding of the social studies skills/concepts. Inaccuracies interfere with the conceptual understanding. The student demonstrates this by:</p> <ul style="list-style-type: none"> <li>– inaccurate use of details (e.g., the challenge, changes, factors of supply and demand, belief systems, technology, cause and effect, etc.)</li> <li>– inaccurate or no use of social studies vocabulary (e.g., population, natural resource, environment, global economy, supply, demand, cost, income, consumer preference, legislative branch, executive branch, judicial branch, veto, Constitution, etc.)</li> </ul>

## Appendix D: Content Distributions by Communication Levels

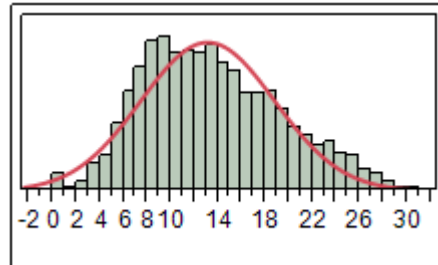
Refer to Chapter 2, Figures 3 and 4 for descriptions of communication levels

### Reading and Expressive Communication Distributions

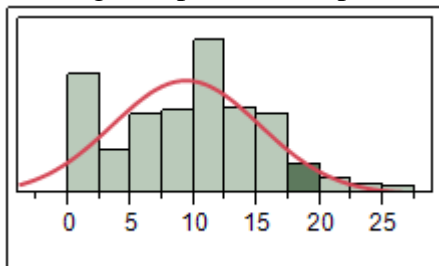
Reading & Expressive Response = 1



Reading & Expressive Response = 2

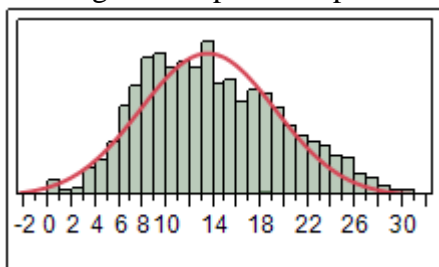


Reading & Expressive Response = 3

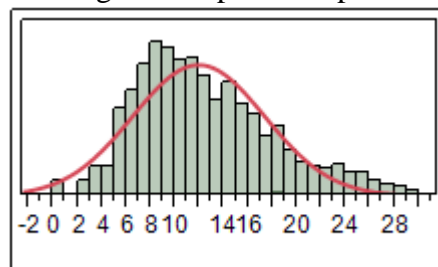


### Reading and Receptive Communication Distributions

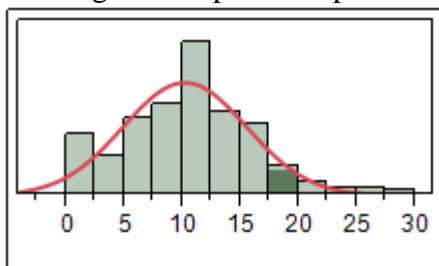
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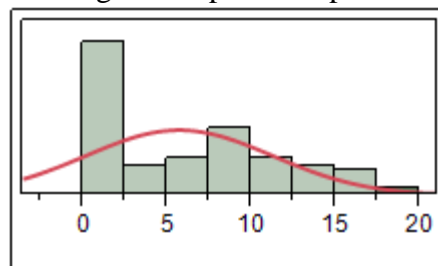
Reading & Receptive Response = 2



Reading & Receptive Response = 3

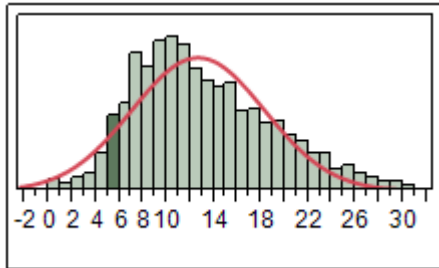


Reading & Receptive Response = 4

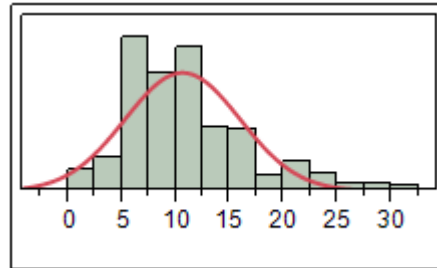


## Math and Expressive Communication Distributions

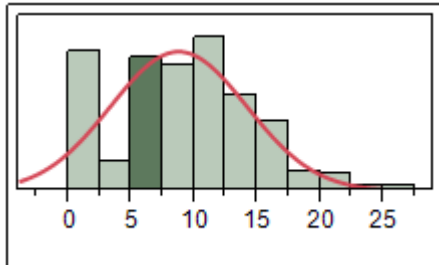
Math & Expressive Response = 1



Math & Expressive Response = 2

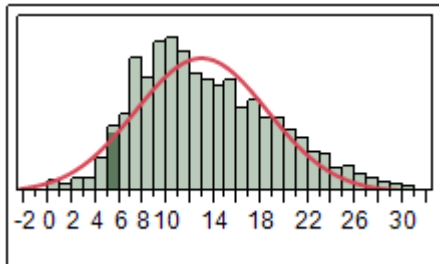


Math & Expressive Response = 3

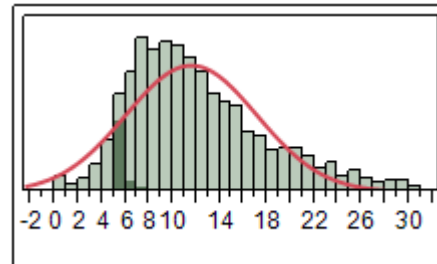


## Math and Receptive Communication Distributions

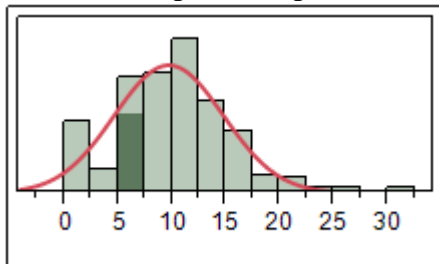
Math & Receptive Response = 1



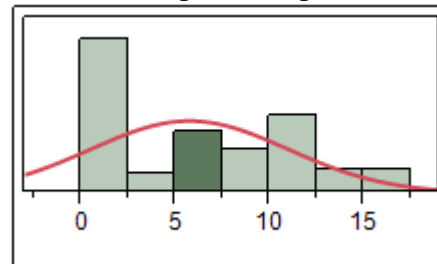
Math & Receptive Response = 2



Math & Receptive Response = 3

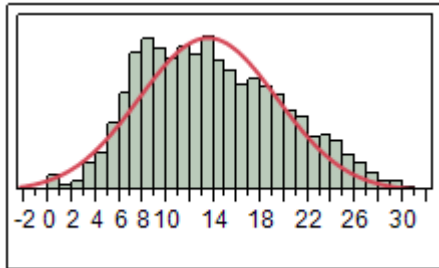


Math & Receptive Response = 4

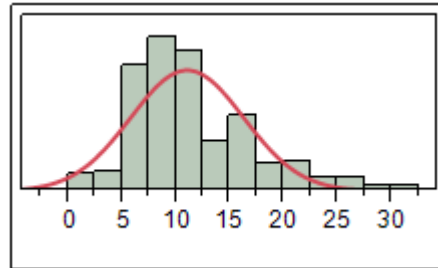


## Writing and Expressive Communication Distributions

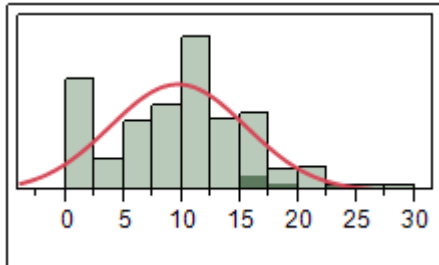
Writing & Expressive Response = 1



Writing & Expressive Response = 2

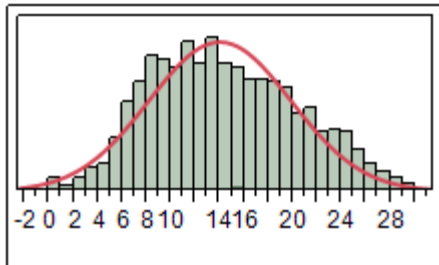


Writing & Expressive Response = 3

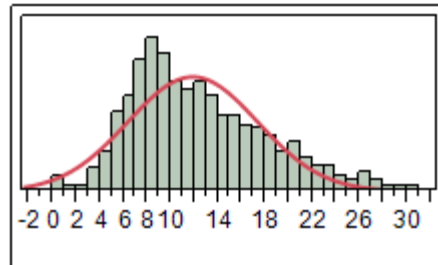


## Writing and Receptive Communication Distributions

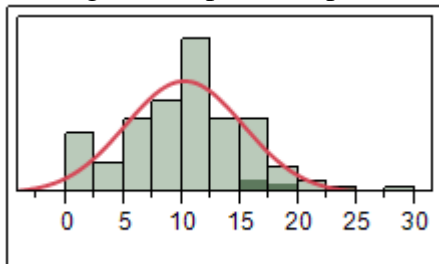
Writing & Receptive Response = 1



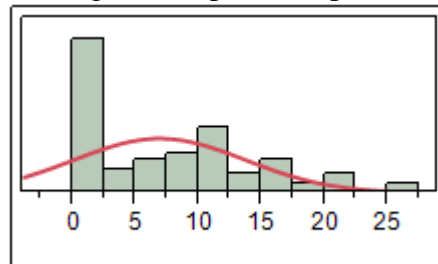
Writing & Receptive Response = 2



Writing & Receptive Response = 3

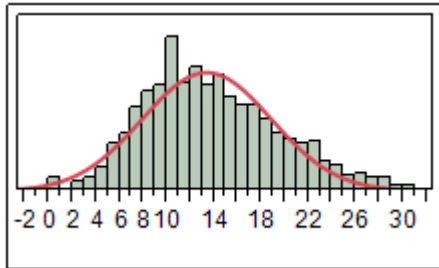


Writing & Receptive Response = 4

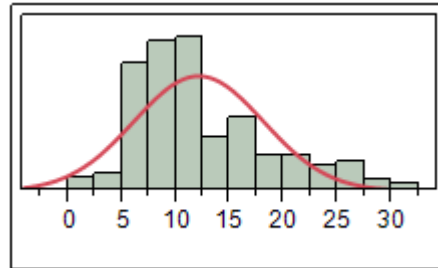


## Science and Expressive Communication Distributions

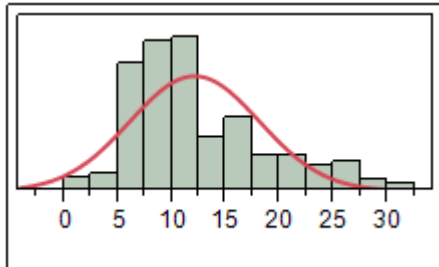
Science & Expressive Response = 1



Science & Expressive Response = 2

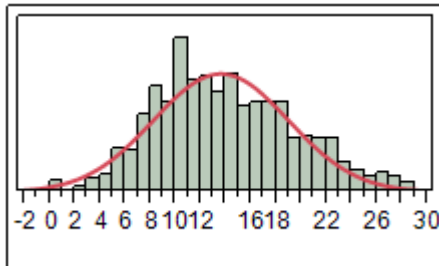


Science & Expressive Response = 3

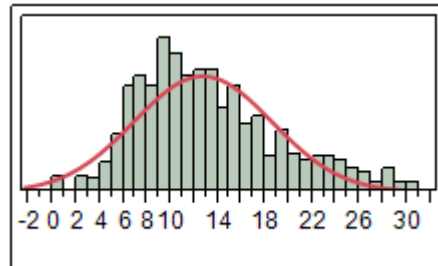


## Science and Receptive Communication Distributions

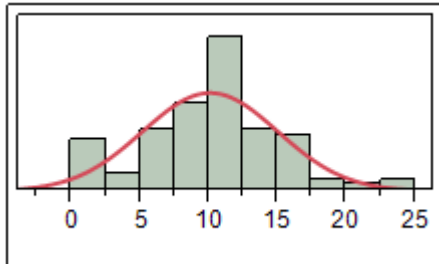
Science & Receptive Response = 1



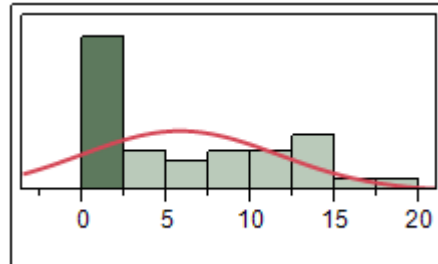
Science & Receptive Response = 2



Science & Receptive Response = 3

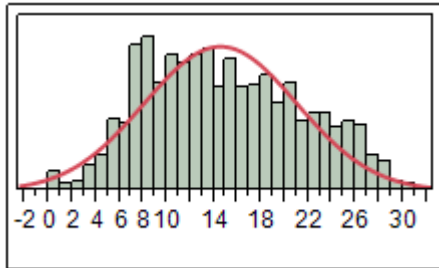


Science & Receptive Response = 4

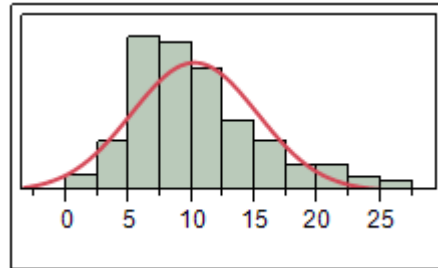


## Social Studies (SS) and Expressive Communication Distributions

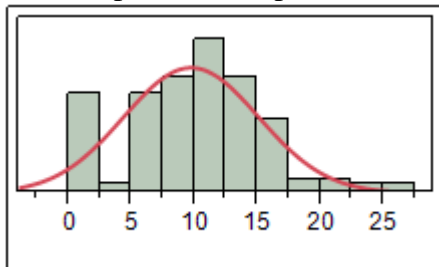
SS & Expressive Response = 1



SS & Expressive Response = 2

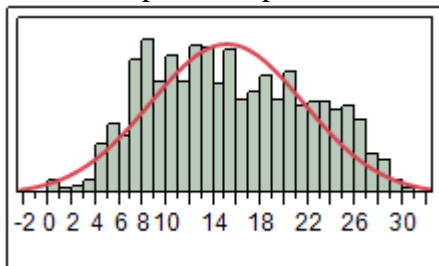


SS & Expressive Response = 3

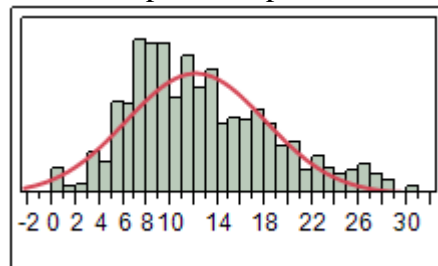


## Social Studies and Receptive Communication Distributions

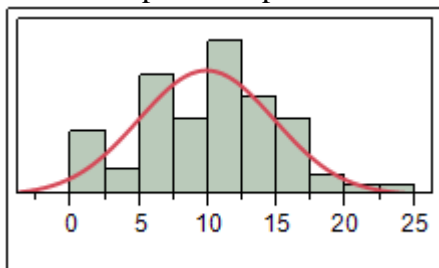
SS & Receptive Response = 1



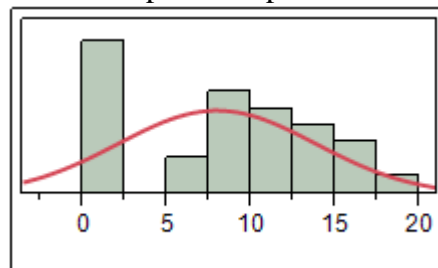
SS & Receptive Response = 2



SS & Receptive Response = 3



SS & Receptive Response = 4



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- Kleinert, H. & Kearns, J., *Alternate assessment: Measuring outcomes and supports for students with disabilities* (pp. 93–134). Baltimore, MA: Paul Brookes.